

THE
VALLEY FARMER:

A Monthly Agricultural Journal,

DESIGNED TO BENEFIT THE

PLANTER, FARMER, GARDENER, FRUIT GROWER
AND STOCK RAISER.

EMBELLISHED AND ILLUSTRATED WITH ENGRAVINGS.

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NORMAN J. COLMAN, . . . EDITOR AND PROPRIETOR.  
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VOLUME XVI-1864.

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BENJAMIN BRYAN, PUBLISHER AND PRINTER,
97 Chestnut Street, St. Louis, Missouri.



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BENJ. BRYAN, PUBLISHER.

VOL. XVI.

ST. LOUIS, MO., JANUARY, 1864.

NO. 1.

THE VALLEY FARMER,
AN AGRICULTURAL, HORTICULTURAL AND
STOCK JOURNAL,

PUBLISHED ON THE FIRST OF EACH MONTH, AT
No. 97 Chesnut Street,

SAINT LOUIS, MO.

Terms—Always in Advance.

ONE DOLLAR PER YEAR.

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Advertisements—\$15 00 per page; \$10 00 per half
page; and \$2 00 per square, each insertion.

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97 Chesnut St., Saint Louis, Mo.

**Essay on the Culture and Management
of Tobacco.**

BY L. J. BRADFORD, OF AUGUSTA, KY.

The success of a growing crop of tobacco depending much upon early planting, the selection of such situations for plant beds as will insure a proper exposure to the sun, is all important. The eastern or southern slopes of hills, near their base, afford the best locations, the beds so situated being free from sobbing, and the warmth of the sun greater than upon flat surfaces. Regard should also be had to the character of the soil. It should be sufficiently close to render it retentive of moisture, and yet contain sand enough to give it quickness; made earths and puffy soils are unfit, being both too arid and liable to heave. Beds prepared in the early part of the season require more burning than those at a later period. There is but little danger of burning too hard, however, at any time, as the plants generally succeed best upon

the beds most thoroughly burned. After the beds are thus burnt and cooled off, they are dug up with a common sprouting hoe to a depth sufficient to afford the plant a loose soil in which to extend its roots. Care should be taken to leave the surface-soil as much on top, in the preparation of the bed as possible, as the young plants will take a quicker and better growth. After the bed is well pulverized by hoeing and raking, the seed mixed with dry ashes are to be sowed as evenly as possible over the surface, at the ratio of a common table-spoonful to every 80 square yards (cubic measure), the bed lightly raked over or trodden evenly with the feet and well covered with brush, on which there should be no leaves, and protected from the intrusion of stock. So soon as the young plants attain the size of a dollar, the brush may be removed—if the weather is dry the brush may be suffered to remain to advantage, and when removed taken off in the evening—with seasonable weather, the plants will soon be large enough for transplanting.

The land designed for the crop should be fertile—if not naturally so, should be made so by manuring. Any common manure will answer a valuable purpose, tobacco being a plant that delights in a rich soil. The land should be deeply and thoroughly plowed whenever practicable, in the fall or winter. In this there is a twofold advantage: 1st, It destroys many insects that injure or destroy the young plant. 2d, It renders the land more friable and more easily cultivated. As the season approaches for planting out the weed (which is here from May to July), the land should be plowed again and kept clean. It is then to be laid off with a plow three and a half feet one

way and three feet the other, and a small hill made in or on the check as may be preferred, for the reception of the plant. The hill should be raised a little above the common level of the surface—the size of the hill being a matter of fancy with the planter, and not regarded as a matter of consequence in general. So soon as the plants have attained sufficient size for transplanting, they may be drawn from the bed and placed on the hills whenever there is moisture enough to prevent their dying. This is generally done after a shower; but should the land be very wet, it is best to wait until it dries or settles some, as the plant will do better set when the land is not too wet. The plant, if it survives the transplanting, will soon commence growing, and requires no attention until the weeds and grass begin to make their appearance, which must be subdued by the plow and hoe. Should the earth become hard about the plant, the hill should be lightly scraped with a hoe. This will greatly promote the growth of the plant. When the plant becomes large enough, the bottom or plant leaves may be broken off. This is called pruning, and the land may then be deeply and thoroughly plowed, taking care not to injure the roots of the plant, and the plant hilled up by following with hoes, and throwing the loose soil around it. In land that has been kept clean, this may be the last plowing; the weeds and bushes may be kept down with the hoe should any appear.

When the plant is large enough to top, the leaves nearest the ground are to be broken off and the bud taken out, leaving on the stalk the number designed for the plant. The number of leaves, as was remarked about the size of the hill, is much a matter of fancy, yet it has more to do in forming the future character of the tobacco than most planters seem apprised of.—Experience has fully demonstrated that ten leaves are sufficient for a plant, and this is almost a universal practice among our best planters. The first plants, if the crop has grown off unevenly, may be placed to twelve leaves; the next topping may be ten, and as the season advances, the number may be lessened, as the appearance of the crop and the season indicate. This will insure more uniformity in maturing of the crop, save much labor, and adds to the value of the crop, making it more uniform in quality. At this stage of the crop, the care and attention of the planter is almost constantly required to keep off the worms and other insects which prey upon it, and in breaking off the suckers which soon appear upon the stalk at

every leaf. Ample employment may be afforded to every idler about the premises.

As the plant approaches maturity it begins to thicken, and assumes a stiff, slick and motley appearance, which the most unpracticed eye will readily detect. Should the weather be favorable (viz: dry), the first ripe plants may be permitted to remain standing until a sufficient quantity is matured to satisfy the planter in making a regular cutting. If, however, the weather be unpropitious, it is best to cut as fast as it matures as it is subject to injury under such circumstances if suffered to remain too long. The harvesting of the crop is an important period in its cultivation, and neglect upon the part of the planter will bring loss in its future value. In cutting the plant, a sharp knife is to be used, and the stalk split about half its length, taking care not to break the leaves or otherwise injuring them, and the plant to be set with the butt of the stalk up, exposed to the sun. So soon as the plant is wilted enough to handle without breaking, they should be taken up and laid in a heap of seven to nine in a place, being governed by the size, and hung as soon as possible to prevent being scorched by the sun.—The after part of the day is best for cutting; there is less danger of getting the plant sunburnt. The sticks upon which the plants are hung are small pieces of timber four feet long, and of sufficient size to support the plants. These are taken to the barn on a cart or wagon after receiving the plants, or may be placed upon scaffolds in the fields, at the option of the planter. If the weather is fair, it is best to sun it, as it aids the curing, and adds to the strength and elasticity of the leaf after it is cured. Care should be taken not to place the sticks too close, if the weather be damp and warm, as there is danger of injuring the plant. After remaining on the scaffold a few days it becomes yellow, or assumes the color of a leaf in autumn; it must then be carried to the barn or curing house, and placed away, keeping the sticks far enough apart to secure a free circulation of air through them. If the weather is wet, it is best to take the plants to the house at once, and let the yellowing process take place in the house, rather than risk the changes in the weather, as rain is always injurious to the plant after it is cut, and especially so after it becomes yellow.

[Conclusion next month.]

A correspondent of the *Wisconsin Farmer* suggests that oats be sown with wheat, as the wheat will be healthier and better.

MIDGE IN WHEAT.

Joseph Harris, of the *Genesee Farmer*, than whom there is no better judge of the subject, living, as he does, in the best wheat section of the State—the Genesee Valley—says the midge injures one field about as much as another, that a small lot will be equally and no more injured than a lot of many acres. From this we infer that there is a certain number of these insects in each locality; and that they will do, if they have a chance, a certain amount of mischief, according to their capacity. Yet, as a large field covers a greater area of insects, so greater damage must be done a large field. But if proportion, or area of the field, is taken into consideration, the rule (of Mr. Harris) may hold good—for the depredations are usually done on the outside, along the borders of the field.

Mr. Harris states the case of a Mr. Hayward of his county, who "obtained his seed from Canada (where the harvest weather of 1855 was propitious, and the wheat was not injured as in this neighborhood,) and sowed two bushels per acre on naturally good, dry wheat soil prepared in the best manner. From the quantity of shrunken grains it was estimated that the midge destroyed about five bushels per acre, and yet the crop yielded over thirty-five bushels of very superior wheat per acre. The midge in this instance destroyed as much wheat per acre as in the first case mentioned, where it eat half the crop, and yet here only one-eighth of the crop was lost."

This is encouraging to large wheat growers. But is it the experience of our wheat growers? We think we have seen something of the kind, though we have never carefully observed.

Mr. Harris goes on: "It is well known that early wheat is less liable to injury from the midge than that which matures later. On this account early sowing is generally recommended; but early sown wheat is more liable to injury from the Hessian fly than late sown. The object of the wheat grower, it would seem, should be to increase the early maturity of the berry."

—SAVE YOUR SOAP SUDS.—If you have idle boys, let them carry your soap-suds to your grass plat or meadow, and sprinkle it on with the water-pot. You will see the effect of this at once. Also applied around trees, after punching holes in the ground. This will take the liquid to the roots. The roots of all bushes can be treated in this way. On sour soils soap-suds have less effect, i.e., on the plants of it.

RYE—ITS VALUE.

The importance of this crop seems to be but little understood by Western farmers. We think if its value as a crop was better known, its cultivation would be general—that every farmer would have his rye field just as much as his field of wheat, corn, oats or potatoes. It is valuable as food, both for man and beast. It makes excellent feed for stock, and is second to wheat only (and scarcely that) in its bread making qualities. Von Thaer says: This substance seems to facilitate digestion, and has a singularly strengthening, refreshing, and beneficial effect on the animal frame."

Rye is subject to fewer casualties than any other crop, though it is sometimes affected by rust. The straw is bright and strong, which renders it better than wheat straw, both for feeding out in the winter and litter for horses and cattle. On farms stocked with cattle and sheep—especially the latter—the great value of this crop does not lie in the grain and straw, so much as in the great amount of pasturage it affords at a season of the year when all other kinds of pasturage fail. It makes excellent feed in the fall, long after grass becomes entirely worthless; again in the spring, so soon as the snow is off the ground, it makes good pasturage, and may be used as such until the grass is large enough to make good feed; nor does this fall and spring feeding injure the crop for grain. Rye is usually ready to cut before winter wheat—hence out of the way before the hurrying season of harvest.

The soil best adapted to rye is a rich sandy loam, though no one of the cereal grains will adapt itself to a greater variety of soils. It will do well on a rich loamy soil—not at all suited to wheat—its stronger stem enabling it to sustain itself under a luxuriant growth. Then again, it will make a better return on a light sandy soil than corn, or any other crop.—[Ez.]

JAPANESE HUSBANDRY.—The Japanese practice only top-dressing in manuring their land. First, a thin layer of compost (containing but little animal matter), then a sprinkling of liquid manure. The chief dependence of the Japanese farmer in enriching his soil, odd as it may appear, is upon human excrements. This is gathered studiously from the entire Japanese population. It is put in vessels fitted in the ground, the top of the vessel on a level with the surface. It remains here several weeks till decomposition takes place. It is then diluted and carried in a bucket to the field as wanted. No barn-yard manure is made, as no animals are kept, as here no meat of any kind is eaten, and the labor of the farm is done by hand—not by cattle or horses. In a word, Japan is an odd country.

What Ails Some of our Wheat Land?

Some of our wheat crops are failing, not from the midge or fly, but the crop is deficient—not what it used to be. There are many such cases. These crops are generally grown on the same soil where wheat has been grown for years: in some instances, always.

The difficulty here is, the ammonia of the soil is taken up—the soil lacks this ingredient, which is the principal ingredient in wheat. For other grains the soil is as good, or nearly, as ever. To make it good again for wheat, simply apply ammonia. This can best be done by the manures which most contain ammonia, and they are such as draw their strength largely from the atmosphere, such as clover and peas, and the root crops. These fed and the manure applied will give you wheat. So will the manure from oats fed, and some other nitrogenous grains. This manure will also hasten the ripening of wheat, and tend to give plumpitude to the berry, whereas, the other manures, obtained from straw and green crops plowed in, will grow straw, and have a tendency to keep green longer. F.G.

Culture of Potatoes under Straw.

N. J. COLMAN, *Dear Sir*: I embrace this opportunity to make a few remarks about the culture of potatoes, suggested by two articles in your December number. Your correspondent R. M., of lower Egypt, says of the crop of potatoes: "This is no country for potatoes, there has been but one good crop here in 6 or 7 years, etc." The farmers hereabout used to say the same thing, as long as they followed the old method of planting; but for four or five years the potato growers have, generally, followed a new method to their entire satisfaction. I will describe it:

The ground is deeply plowed, it is best to plow it before winter; manure it during winter, and plow it again in spring, and harrow. Then lay the potatoes on the top of the soil, and press them in a little with your foot; then cover the whole patch with straw, 8 to 10 inches deep, and the work is done until you dig them out in the fall.

The advantage of this covering with straw, is: 1st, Your soil keeps moist during summer; 2d, It will keep mellow the whole season; 3d, The weeds are prevented from coming up; and 4th, The digging of the potatoes is much easier, because in fall you find them partly lying just on the top, and the balance but one or two inches deep.

An experience of five years has shown that,

by this method, the crop of potatoes not only increases in size and quantity, but improves also in quality. Being a native of Germany (which country is celebrated for excellent potatoes), I heretofore could not be satisfied with the quality of the potatoes raised here; but now I am entirely satisfied, and find them as good and mealy as in my old country.

I generally plant them 18 inches apart both ways, and make a crop of about 50 bushels on one-fourth of an acre, and that without plowing before winter or manuring. A neighbor of mine who did so and planted several acres, got from 250 to 300 bushels per acre. During the time this method has been followed here, no crop of potatoes has been known to fail either in quantity or quality.

Belleville, Ill., Dec. 11, 1863. T. HILGARD.

[Written for the Valley Farmer.]

THE BEAN.

It is much with the bean as with other fruit—it wants cultivation and attendance. Like corn, it does not want hoeing, farther than to kill the weeds. A mellow soil is particularly its liking; and a little sand or gravel is grateful. It will then do well in poor soil, though better if a little rich. We have known the heaviest crops raised from rich soils—corn-producing soil. They will even do well among corn. We have seen this done largely, and see it every year. But the bean will grow where corn won't; and it will give you a white, marketable berry. Your soil rich, rows close, and hilled, i.e., ground drawn up to them, and then wet weather super-vening, your beans are pretty sure of getting dark-colored.

Free cultivation in mellowing the ground and keeping it clear of weeds; the rows with plenty of air circulating through—a little nearer together than corn, otherwise treated much like it—is what you want.

As to harvesting beans, it is considered the most difficult job. Many beans have been lost by not being well secured. We have lost them ourselves. They should be pulled much as you gather grain and corn, before too ripe, when the leaves are yet green, and the berry is yet soft—not milky. This seems early, but it is not. It puts your beans out of the way of the frost; it gives them a chance to ripen and to dry; and they will be plump, white and shiny—a sound, ivory bean, that will rattle when you pour it into the measure. There is great difference in the price of beans. Such a bean as we have described will command from a quarter to a

third more in market, and less trouble is required with it than to get a poor quality. With beans it is knowing how to do it, more than with most grains.

The best seed should always be selected for planting. Equal in size and equal in ripening, are the points. A.R.

A FEW FACTS ABOUT STRAW.

We rely pretty much upon straw as a manure—too much. There is little strength in straw, such as we generally find it, ripe—we may say over-ripe: It is however very beneficial in one respect—it attracts the strength of other real manure mixed with it, that is, it fixes the ammonia, the most important part of all manure. In this way it acts like soil, plaster, muck, &c., by retaining the gases.

There is another thing for which straw is good, it is good to feed, when properly produced and properly managed. There is great difference, as we have before repeatedly stated, in harvesting straw. If cut when yet green, it amounts to hay, especially pea and oat straw. If cut early enough to just secure the grain, when the berry is yet somewhat soft, straw produces 16 per cent. nutritive matter, according to a recent English authority, whereas, when fairly ripe, there is but 10 per cent., while over-ripe straw has but 3 per cent. This is important information, and should by all means be remembered, and acted upon. It must further be remembered that this same rich straw makes so much the richer manure. But, there is another thing. Straw, when fed with grain, is better, goes farther, than if fed alone. Why it is so, we have not ascertained. We have always found it a benefit; and we find many people indulging in the same practice. Good, nutritious straw is probably as good, fed with grain, as hay: we mean the best kinds of straw, such as pea straw, oat and barley straw. These straws, when early cut and properly harvested, are under-rated as feed for stock.

LODGED GRAIN.—Lodged grain is an evil. Always remember that lime and salt stiffen the straw. Harrow your lime in with your grain, and sow your salt, or as soon as the last plowing is done. Your straw will be the brighter and the harder, and your grain the better, as well as a nice increase of bushels. John Johnston, the noted New York farmer, says he applied, in 1844, two hundred bushels of lime on two acres, before sowing the wheat, and it was a magnificent crop—over fifty bushels to the acre. And he says he can see the effect of the lime to the present day.

SELLING PRODUCE.

There is a mania often connected with the selling of produce. We have known it range high in hops. Restless nights and general unhappiness was the result. We witness it yearly. The consequence is, hops are badly sold. A man in such condition is not fit to manage his sales. He is in constant fear, and that breeds derangement, tremor, mischief.

We have known farmers do the same with oats, wheat, &c. Butter and cheese, are also the same. We have seen many bad bargains made by "holding on." The most, we may say, all things considered, are made this way. A healthful effect is observed, on the other hand, where produce is sold as soon as fitted for market. There is no anguish of mind; no bad health engendered; no time spent in inquiry. Other business is attended to; and, on the whole, we find such men get more for their produce in the long run.

Sell when ready to sell, and do not torment yourself. A few hundred dollars has an important bearing on the mind, if a person entertains the thought. He will soon worry; and mental hurt is sure to be the result. The thing continued, the hurt will soon become evident. Many have lost their reason in consequence. Many have been unfitted, partially or entirely, for business. It is a subject of truly great importance, being one of the mental disorders—a fever of the mind. Avoid the danger, by taking a rational price, yearly, for what you sell.

A CASE OF ROTATION.

The four course system of England, and the five course of the county of Onondaga, N.Y., are remarkable. The latter, better adapted to this country, is—for the first year, corn, upon a clover and Timothy sod; for the second, oats or barley; for the third, wheat, with six quarts of Timothy and clover each and one and a half bushels of plaster; for the fourth, hay; and for the fifth, pasture. Under such a course, where all the coarse fodder and hay are consumed by sheep and a few horses and cows for farm use, and only wheat, and the produce of the fold sold, there is but little left for improvement, except in some regions in the introduction of roots and the feeding of them to sheep, and with straw to store cattle. The advantage would be marked in economizing the feeding value of straw. A. B. CONGER.

Grazing always enriches a country; farming impoverishes it—first, by impoverishing the soil; second, by not replenishing it.

The Effect of Apple Pomace on Land.

Apple pomace will kill vegetation as effectually as anything can. We have known it used for the destruction of weeds, &c., with the best effect. We remember a potato patch of $3\frac{1}{2}$ of an acre, on the old homestead, that was completely killed by it. It took years to restore it; but the weeds were gone. It is generally a question what to do with pomace. After the potato patch was ruined, we used to throw it into the gully; and even then the brook would carry it along (the juice) to further injure the flats. It was considered by all a nuisance.—It is so considered still generally. And yet this need not be. *Neutralize the acid, and you will soon have manure.* Lime or ashes will do this. As the pomace is heaped up, scatter lime with it. In the summer, work it into the compost heap; or make a compost heap of it by applying soil, muck, manure, &c. In the fall, you will have a heap ready for top dressing your meadows, or to harrow in with your wheat—and the evil effects of your pomace, the not knowing what to do with your pomace, will all be obviated.

SOWING GRASS SEED WITH CORN.

The best piece of Timothy grass of one season's growth, which we have ever seen in the State, was in Jones county. We learned from the owner of the farm that the ground was seeded early in July the previous year, "when the corn was laid by." The ground was worked flat with a small, fine-toothed cultivator. The stalks were allowed to stand until the following spring, when they were cut close into the ground and removed. The result was a uniform stand and heavy crop of grass.

A correspondent of the *Germantown Telegraph* communicates the following on seeding after corn or potatoes: "Experience has shown that the most judicious, and, ultimately, most economical method of laying lands to grass, is to sow the seed immediately after corn or potatoes; or some other weeded crop, and without any accompanying crop. This insures a ready and vigorous germination, a rapid and healthy development of the youthful plants, and remunerating crop, and secures a sustained production which can be effected so readily and cheaply in no other way. In examining carefully fields managed in this way, we shall find that the plants have a much broader expansion, and firmer grasp upon the soil, than the roots of the same kind of plants on lands which have matured a crop of cereals.

By cleansing the surface of lands after taking off a crop of potatoes, for instance, thoroughly pulverizing it by harrowing, having previously applied, broadcast, a few cords of fine compost, or old well-rotted stable manure, and sowing herds-grass, red-top and clover, allowing about double the quantity usually sowed, and covering it by

means of a suitable harrow, followed by the roller—we shall be sure to secure a good crop of hay the next year, which will exceed in value the grain which the soil would have produced, to say nothing of the exhaustion of the soil, which the latter would necessarily effect.

If we examine grass plants growing among wheat, oats or barley, or indeed with any dry crop, we shall find them exceedingly weak and spindling; the foliage, when there is any, pale and thin, and the whole appearance of the plant indicating imbecility and disease. Such is not the case where the seed is sown by itself. It then starts vigorously, comes forward with a rapid and sustained development, and is not subject to those sudden and fatal checks which militate so powerfully against their advancement when shaded by grain.

[Written for the Valley Farmer.]

FROM COLORADO.

This Territory, occupying about three degrees of latitude, has consequently some variations of climate. In the northern part, the winters are cold and dry; and in the southern portion more mild, and spring comes somewhat earlier. The climate is free from the long drizzling rains and foggy weather of those States within the influence of the great lakes and portions of the middle and border States. The summer is free from the scorching rays of a more southern sun. When the heat relaxes, the winds grow more strong, and generally continue until the next spring. We grow as fine vegetables as can be grown any where. In the Snowy Range, where perpetual snow exists, and whilst standing with one foot on the snow, I have gathered flowers within two feet of the snow in the middle of July. The flowers exist in great abundance in close proximity. A beautiful sight is it indeed from the top of the snowy range.—The water runs in opposite directions—that on the east for the Mississippi, and that on the west to the Pacific.

The cereal grains brought forth only a moderate yield this season; the potato crop was about half as large as was expected, and the whole vegetable crop a moderate one. Spring is early here and the grasshopper ruined the crops on many of the best lands. The rainy season lasted only a few days, instead of six or eight weeks, as usual. Last winter the fall of snow was very light, consequently it soon melted, and several of the creeks and streams dried up, leaving a scarcity of water for irrigation; hence, the partial failure in the crop. The frost did very little damage to the crops, and we did not have a killing frost until several of the States had been visited. Our hay crop is also quite small, and will undoubtedly be all exhausted ere spring makes its appearance, that is if we should have a hard winter, and it is the general opinion that we will have a pretty severe one in this section. O. S. TAMPLER.

Colorado, Oct. 1863.

AGRICULTURAL ITEMS.

REPAIRING A CHAIN PUMP.—A correspondent of the *Germantown Telegraph* says: "For some time my chain pump has been out of order, the pipe having become too large for the boxes. I could not find a carpenter who had the tools or the material for making a new one, and I had worried myself for weeks about it, when I met a boy who told me to put leather upon the chain, so as to enlarge the boxes. I thought of poor Robinson Crusoe, who, when he could not get his boat to the water, concluded it would be wise to get the water to the boat—and did as the boy suggested, and have thus a much better pump than when it was new. It is the little things which are the most difficult to be seen."

CABBAGE PLANTS.—A farmer near Chicago adopts a novel way of raising early cabbage plants. He takes an old hog trough in the fall and fills it with soil, and puts on the top of a fence, or any place that will be five or six feet from the ground. Here it remains all winter. The frost mellows the soil, and in the spring it will be fit to "work" much earlier than the soil in the garden. He sows the seed in the trough, and has all the plants he wants and some of the neighbors, and earlier than they can be raised in any other way. A frost which will kill tender plants on the surface of the ground, does not trouble those on the fence in the hog trough.

PRESERVING SWEET CIDER.—A correspondent of the *N. Y. Observer* observes that horse-radish roots will preserve sweet cider without destroying its "life." Half a peck to a barrel of cider; the cider is to be thoroughly strained or cleared. The radish is also good to prevent fermentation in pickles.

SQUIRREL SKIN SHOES.—The *Richmond Whig* says: "Squirrel skins tacked down to a board, with hickory ashes sprinkled over them for a few days, to facilitate the removal of the hair, and then placed in a strong decoction of red-oak bark will, at the end of four days, make excellent leather, far tougher and stronger than calf skin. Four skins will make a pair of ladies-shoes. We hear that the ladies of some of the interior counties are wearing these shoes, and find them equal in softness, and superior in durability to many others."

TO PREVENT SMUT IN WHEAT.—Wash your seed wheat in strong brine. This will also lift the light grains and foul stuff, and give you clean seed wheat.

Apples when cooked (or raw, when mellow,) are nearly as good as potatoes for hogs. Cooked sweet apples, with a little meal, are excellent to fatten hogs. Experiments have proved them equal to potatoes.

A DISINFECTANT.—Green copperas dissolved in water will effectually concentrate and destroy the foulest smells, and if placed under a bed in hospitals and sick rooms, will render the atmosphere free and pure. For butchers' stalls, fish markets, sinks, and wherever there are offensive, putrid gases, dissolved copperas sprinkled about will, in a day or two, purify the atmosphere, and an application once a week will keep it sweet and healthy.

RECIPE FOR CURING MEAT.—To one gallon of water take one and a half pounds of salt, one-half pound of sugar, one-half ounce of saltpetre, one-half ounce of potash. In this ratio the pickle to be increased to any quantity desired. Let these be boiled together until all the dirt from the sugar rises to the top and is skimmed off. Then throw it into a tub to cool, and when cold pour it over your beef or pork, to remain the usual time, say four or five weeks. The meat must be well covered with pickle, and should not be put down for at least two days after killing, during which time it should be slightly sprinkled with powdered saltpetre, which removes all the surface blood, &c. leaving the meat fresh and clean.

Some omit boiling the pickle and find it to answer well; though the operation of boiling purifies the pickle by throwing off the dirt always to be found in salt and sugar.

If this recipe be properly tried, it will never be abandoned. There is none that surpasses it, if so good.

HOME-BREWED ALE.—G. Burton, in the *Rural New Yorker*, gives his method of making home-brewed ale, as follows: "The art of brewing is very easy to be understood, for it is exactly similar to the process of making tea. Put a handful of malt into a tea-pot; then fill it with water—the first time rather under boiling heat. After it has stood some time, pour off the liquor just as you would tea, and fill up the pot again with boiling water. In a similar manner pour that off, and so go on filling up and pouring off till the malt in the pot is tasteless, which will be the case when all its virtue is extracted. The liquor or malt tea must then be boiled with a few hops in it, and when it becomes cool enough—that is, about blood heat—add a little yeast to ferment it, and the thing is done.—This is the whole art and process of brewing; and to brew a large quantity requires the same mode of proceeding as it would to make a tea breakfast for a regiment of soldiers. A peck of malt and four ounces of hops will produce ten quarts of ale, and of better quality than can usually be purchased."

MARKING TREES.—The *Gardener's Chronicle* has hit upon a happy way of identifying trees, namely, to cut the name of the fruit into the bark. A decent scratch is sufficient. It will last the lifetime of the tree.

THREE HINTS FOR THE SEASON.—Be sure and cover the bits of your bridles with leather, to prevent the frost from making the mouths of your horses sore. It is downright cruelty to put an iron bit into a horse's mouth on a cold morning. If you doubt it, bit yourself some day, when the mercury stands below zero.

When you cut India rubber, keep the blade of your knife wet, and you can cut it without difficulty.

We have heard of and tested a great many kinds of water-proof blacking for winter boots. Let us tell you what we have tried for two winters, and found to be the best article we know of. When your boots are stiff and you think need oiling, wash them in castile soap suds—oil before the leather dries (you may use black ball or any kind of grease), have a saturated solution of gum shellac in alcohol—any body can make it, as all there is to be done is to dissolve in a pint or half pint of alcohol just as much shellac as the liquid will take up—and apply this solution with a sponge to the oiled boots.—In two or three minutes the shellac will dry and harden, and you will have a coating on your boots through which the water cannot by any possibility penetrate. Try it, reader.

A THING WORTH CONSIDERING.—A close discernor in agricultural matters says: "It is not in the production of grain, but in the production of beef, pork, mutton and wool that the West has the advantage of us. I know this is contrary to the generally received opinion, but as long as the Atlantic cities continue to be the great markets of the country, so long will it be cheaper to send beef, pork, mutton and wool to these markets than wheat and corn, for the simple reason that the freight on a hundred dollars' worth of these articles is much less than on a hundred dollars worth of wheat and corn. It costs the Western farmer much less to send five pounds of pork to New York than to send the sixty pounds of corn from which this pork is produced. And so it is in regard to beef, and mutton, and wool. We shall be obliged to submit to a much keener competition in the production of these articles than in the production of wheat, corn, oats, barley and other bulky articles on which the freight from Iowa amounts to five or six times as much as the farmers there receive for them."

POTATO DISEASE.—Have any of our friends ever grown potatoes that ripened before the rot set in—we mean thoroughly ripened, the vines dead, before the period of the disease occurred? If they have, will they please communicate the result. It is claimed that potatoes ripe before the rot will not be affected, though the year is a favorable one for the disease, and late potatoes rot alongside the ripe. How is it?

LOCAL FARMING.—The farmer should conform to the general principles of farming wherever he is, and then adapt himself to his locality. This he must do by practical experience and observation; for each locality has points peculiar to itself. These must be understood. And the farmer must seek it out for himself. Thus, one soil has clay, another sand, and so on. The climate is different, not only in latitude, but elevation, which, in the farming sense, is latitude. Some localities also are more subject to rain; some to fog. Some localities have access to manures that others do not—and the different manures are to be used on different soils.—These things are as necessary to understand as the general principles of farming. It is upon these often that the farmer's success mostly depends; and the farmers of a locality can greatly aid one another; and this is done.

THE BEE MOTH.

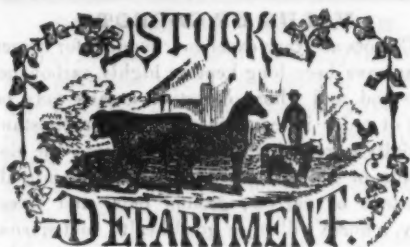
ED. VALLEY FARMER: I notice several useful articles in the *Farmer* on the management of the honey bee, but nothing is given as a remedy for the bee moth, which is the great drawback to keeping bees. Do you, or any of your readers, know of a remedy? It would be a great thing for the country if an effectual plan could be found. Next year I intend to try a plan of my own, that is to suspend the hives about one inch from the stand, so that no part of the mouth of the hive rests on it, by which means the moth can get no cover to lay its eggs. Should it prove successful I intend to let you know of it.

Peevely Springs, Mo.

J. BARR.

REPORT YOUR SUCCESS.—How much that is known by our successful farmers, is never communicated! We see fields of the richest grain, excellent cattle, good fences, &c.; farms that the mind singles out among inferior land, and is delighted at such prosperity, wondering how the improvement was brought about. Who has not such farms in his mind's eye? And yet these farms to the public are unknown; only the neighbors are benefitted by the example.—Here is valuable matter. Why not report the success, how it was brought about, so that others may get the benefit? It matters not if it is said in a homely way, it is only said.

VARNISH FOR SHOES IMPERVIOUS TO WATER.—Take a pint of linseed oil, six ounces of beeswax, two ounces of resin, half an ounce of mutton tallow, and melt them together, stirring them well. When about milk warm, apply it. The leather should be dry. Repeat it a few times warming it in, and no water can pass through, and it greatly increases the durability of boots and shoes.



A WORD FOR THE BRUTE.

Does the farmer ever realize that the brute can be made happy? Few people ever think of this. The humane man may have some sort of thought on the subject; but, generally, we look only to the profit; we have that in view when we treat our stock well. Is not this so? And yet—should it be so? An animal has pain and pleasure; is just as susceptible as a man; it suffers keenly, and enjoys keenly—but it is dumb; it cannot tell its sorrow, only show it by trembling in the cold, or dumb resignation. It has not the brain to think and the tongue to tell, that its lord and master has. And because this is its situation; and because it has money in its carcass and hide, it must be deemed as an inanimate thing, as so much grain or timber.

Is this right?

There are some humane men, who, from a principle of humanity, treat the brute—all brutes—leniently, with sympathy. These are pretty sure to treat their own species in the same way. Cattle will not suffer at the hands of such men. And they know their master, their friend, so they feel undoubtedly towards him. Ah, could the brute talk, there would be a revolution in this respect; we would then treat our cattle better.

The brute enjoys good feeding. Does anybody doubt this? He enjoys good shelter. Who doubts this? And is it no pleasure to give him these? Then there can hardly be any pleasure in seeing our own species happy. We know there are such men; indeed, the world is pretty full of them; they are the rule, we were going to say. Such men will abuse their cattle. That accounts for the general neglect we see.

Now, were we possessed of the principle of humanity, there could not only be more happiness among ourselves, in consequence of the enjoyment of this feeling ourselves, and among those around us, to whom we would communicate—but from a necessity of our nature, our cattle, and all around us would be the better for it. Does any one doubt this?

A brute will appreciate, will become attached to us, as we all well enough know, (will it become attached by abuse?) and will thrive in consequence. And a benefit is derived from this treatment, a benefit to us as well as the brute.

SELECTING EWES FOR THE RAM.

Where there is an opportunity to choose between several valuable rams, the selection of the ewes to breed to each, requires judgment and careful study. The flock of ewes should be examined, the individual excellencies and faults of each, and hereditary predispositions and actual habits of breeding, so far as can be ascertained, fully taken into account; and then she should be marked for the ram, which, in himself, and by his previous get, appears on the whole, best calculated to produce improvement in their united progeny. Many of the Vermont farmers thus divide their small flocks of ewes into parcels of ten or twenty each, and take them to the rams owned by a number of different breeders; for, by a prevailing custom, the liberality of which cannot be too highly commended, all the most distinguished breeders of that State allow other persons to send ewes to their best stock rams for a merely nominal compensation, considering the advantages which are often thus secured. This enables the owners of flocks who cannot afford to incur the serious cost and risk of keeping a number of high-priced stock rams, to obtain, notwithstanding, the services of those which are best adapted to breeding with each class of their ewes. And the young and less skillful breeder can thus, too, obtain the immense advantage of using the most perfect sire rams in the country—those which are too costly for his purchase—and those which will improve his flock more in the first generation than he could possibly otherwise improve it in five generations.

Coupling.—Very few flock-masters now feel that they can afford to bestow the whole annual use of a choice, high-priced ram on the seventy-five, or at the very utmost, on the one hundred ewes he can serve, if he is permitted to run at large with them; and to accomplish this, he must be a very strong animal, and must be taken out of the flocks nights and fed by himself. And no even tolerably good manager turns two or more valuable rams at the same time into the same flock to waste their strength, excite, worry, fight, and perhaps kill each other. Even the ewes are frequently injured by the blows inflicted by a ram while another ram is covering her.

There are several different modes of putting

ewes singly. Some keep "teasers" in the flock so "aproned" that they cannot serve a ewe, and daubed with lard and Venetian red under the brisket, so that when a ewe will stand for them she is marked red on the rump. The flock is driven several times a day into a small inclosure (usually a sheep barn), in apartments of which the stock rams are kept, the "redded" ewes are drawn out and each is taken to the ram for which she is marked. After being served once, she is turned into the flock of served ewes.

Another mode is to use no teasers, but to drive in the flock selected for a particular ram twice a day, and let him loose in it; and as soon as a ewe is served to draw her out. After three or four are served, the ram is returned to his quarters, and the remainder of the flock to the field. A very vigorous ram may be allowed to serve from eight to ten ewes a day. This last mode is now generally preferred. It takes up but little more time than the other. It saves the expense and trouble of keeping teasers, which must be frequently changed; for after making their fruitless efforts for two or three days, they generally almost cease to mark ewes. Lambs and yearlings are nearly useless for teasers. Good stock rams ought not to be put on this service, for it rapidly reduces them in condition.

Any mode of effecting the object in view—one on the correct management of which the success of breeding so much depends—must be conducted with rigid accuracy, so that the mark on the ewe shall in all cases indicate the ram actually used. An erroneous record is vastly worse than none. It misleads the owner, and cheats the purchaser who buys with reference to its showings.

The served ewes should be returned to the ram after the thirteenth day. If they come in heat again, it is usually from the fourteenth to the seventeenth day; but the number is ordinarily quite small if the ram is a good one, and is well managed.—[*Practical Shepherd*.]

A LADY'S PLAN OF MAKING BUTTER IN WINTER.—The cream is skimmed each day, and placed at once in a kettle, and the kettle put into hot water (to prevent scorching) and put over the fire. The cream is allowed to scald, without boiling. It is then put into a vessel and set aside; each day's cream being in like manner scalded, and added to the mass, until enough for a churning is obtained. The churning is commenced immediately after adding the last day's cream, which brings the whole to a proper temperature, without thinning by the addition of hot water.

VALUE OF CARROTS.

Carrots are very excellent "fodder" for horses that have been long kept on highly carbonaceous food, and whose digestive organs may be out of order in consequence of their constant activity in reducing meal and oats into the elements of animal nutrition. With a fair allowance of carrots, ground oats, and sweet hay, a horse will enjoy good health and spirits, have a loose hide, shining coat, and healthy lungs. A daily allowance of carrots should always be furnished to horses, the subjects of indigestion; whose food often runs into fermentation, inducing diarrhoea, or a lax, watery state of the bowels. Carrots furnish an acid called pectic, which possesses the curious property of gelatinizing the watery contents of the digestive cavities. A few drops of this pectic acid will gelatinize both, and when mixed with the juice of an orange, changes the same into jelly. So that if the alvine discharges of a horse are watery, carrots can be used as a valuable therapeutic agent, both in view of arresting the same and restoring the tone of the stomach and bowels. By examining the excrements of a horse, fed in part on carrots, it will be found to contain no undigested hay nor oats, and therefore we may safely infer that they promote digestion, so that by the constant use of carrots, less quantities of hay and oats will suffice than when a larger amount is consumed, and parted with, in an undigested state. For fattening animals, carrots are exceedingly valuable. It will be urged that carrots are not very nutritious—that may be; still, if they possess the property of gelatinizing the contents of the stomach and bowels, they aid in the manufacture of fat out of other food, which might otherwise pass out of the system.—[*Horse Owner's Hand Book*.]

TREATMENT OF KICKING COWS.—J. C., of Norfolk, Ct., says in a letter to the *Agriculturist*: "The following treatment, which I have tried for some years, has never failed to stop the evil. Put a strap round the cow, just in front of the bag, and buckle it rather tight. If the cow tries to kick, draw the strap a little tighter. She will never get used to it, and it never does any injury. She will keep on eating as usual, but has no inclination to lift her feet, even to walk about." This may answer the purpose; the experiment is easily tried.

In witness whereof, we hereby testify to having tried the above, successfully, years ago, upon a three-year-old heifer. It is a sure "pop" every time.—[*Ed. N. H. Journal of Agriculture*.]

We tried it this fall upon a two-year-old heifer, and it worked like a charm.—[*Ed. of Plowman*.]

DISEASES OF THE HORSE.

OPEN JOINTS.—These are generally the result of a punctured wound; the capsular ligament that surrounds the joint and confines the joint oil within its proper limits being thereby penetrated. These accidents are often attended with serious results, from the inflammation that is likely to arise from such an injury.

For treatment, efforts should first be made to close the wound, that the escape of the oil which lubricates the joint may be prevented. If the wound is small it may be closed by means of a hot iron; if large, shave off all the hair around the opening, apply a piece of linen cloth well saturated with collodion, and bandage the part. Care must be taken to have the skin around the wound perfectly dry, or the collodion will not adhere. Shoemaker's wax, or common glue, applied in the same way, will frequently answer the purpose. The animal must be kept perfectly quiet, his bowels opened, and he be kept upon his feet for several days; if, however, the collodion adheres well, this is not of so much importance.

CRACKED HOOF.—This disease, also called sand-crack, occurs only in the hoof that is dry, hard, brittle, and contracted. The hoof in a natural, elastic condition can be bruised, but not split up if double the force that splits the dry, contracted hoof is applied. This crack occurs most generally at the quarters, and most always in the fore feet, they being almost alone subject to contraction. If the crack extends through the hoof it causes very painful lameness.

For treatment, the foot must first be carefully examined to see that no dirt has worked in under the hoof; the loose parts of the horn must be cut away; a pledget of tow, saturated with sulphate of chloride of zinc, or tincture of myrrh, should be applied, and a bandage carefully put on to keep it in place and keep out the dirt. As soon as the new horn has grown down a little, draw a line across the top of the crack with a drawing knife or scribing-iron, and apply a little tar or hoof ointment. If the crack is at the toe, a shoe with a band running across from the heels to a little below the coronet in front, and united by two screws, will often be all that is required, and the horse may be kept at work; but in quarter crack it is unsafe to use the animal, particularly if it extends through to the soft parts. If the frog is in a healthy condition, which is rarely the case, a bar shoe, eased at the quarter, will be found beneficial.

SOLE BRUISE AND GRAVEL.—Accidents fre-

quently occur to the feet of horses from their striking them forcibly upon stones and other hard substances. Pressure of the shoe upon the sole is the occasional cause of bruises of that part of the foot; and tender heels more frequently arise from bruises than from any other cause.

For treatment, if pus is secreted within the hoof—which may be discovered by the acute pain caused by a light tap of a hammer on that part of the hoof under which the matter is situated—the hoof must be cut through, that the matter may escape, as it will gradually work its way upward and make its appearance at the top of the hoof, thus rendering the treatment more difficult. After the matter escapes through the opening so made, throw in an injection of sulphate of zinc in solution, one drachm to a pint of water. For the treatment it will be the same as recommended in quitter. Gravel sometimes works into these wounds, which must always be removed and the parts carefully washed.

FOUNDER.—Founder, or laminitis, is an inflammatory condition of the *laminæ* of the feet, which are the most sensitive parts of these important appendages. Founder is said to be produced by various causes, such as hard driving, watering when warm, standing in a draught of air, or upon plank floors, and many others.

The author, however, views it in a different light, attributing its existence principally to one general cause, namely, contraction of the hoof, the causes before named being the immediate or exciting causes. This view is sustained by many facts. Founder does not occur in one case out of fifty in a healthy, open foot; nor are the hind feet often involved, as they are rarely in a contracted condition.

The symptoms are a full, quick pulse, from sixty upwards; accelerated respiration; the fore feet are hot and tender, the animal for relief throwing his body back upon the hind legs, extending his fore legs until he rests upon the heels, and sometimes lying down, particularly if the hind feet are involved; the animal also manifests much pain.

If the animal is in full condition, two quarts of blood should be taken from each of the fore feet; an active purging ball should be given, followed by one drachm doses of belladonna made into pills, every four hours; poultices of flaxseed meal should be applied to the feet for several days; injections of soap and water, also ought not to be neglected. By this treatment the animal is usually well again in a week, or even less; but if the disease is neglected until it be-

comes a chronic, the animal will ever after remain unsound, though he may be rendered useful. From the alteration or disorganization of structure that takes place, there can little be done in the chronic stage except careful shoeing, which the smith should understand.—*Ex.*

CARE OF HARNESS.

T. Oliver Ayres, a practical harness-maker, Kent Co., Del., says: "Harness should be kept hung up on wooden pegs in a clean, dry room, with a plank floor, so that it may be free from dampness. When soiled, it should be washed with castile soap suds. Harness that is in constant use needs oiling four times a year; if only occasionally brought out, as carriage harness, &c., twice a year will be sufficient, if the washing be not neglected. To oil harness, separate all the pieces, and lay them in water until thoroughly wet through. Then wash them clean and allow them to dry sufficiently. To know when they are in a good condition for oil, bend a strap, and if the water does not ooze out it is dry enough. Train oil (whale oil) is sometimes used, but neat's-foot oil is much better. Mix with a little lamp-black, and with a brush apply it to both sides of the straps. About six hours after oiling, wash the whole with castile soap and warm water, let them dry, rub well with a woolen cloth and buckle them together."

Whale and most vegetable oils injure leather. Neat's-foot oil, with the addition of one ounce of bees-wax to the pint of oil, is the best mixture that can be used for harness. Soap suds should only be used with a sponge to wipe off the dirt; the leather must not be soaked with the suds. A good method of keeping harness in good condition and appearance, is to blacken and polish it exactly like shoe leather, then apply the mixture of neat's-foot oil and beeswax.

HEAVES.

Ordinary heaves is usually occasioned by a deranged condition of the digestive organs; it is accompanied by emaciation, and seems to resemble that affection known as asthma, and is attended with the same difficulty in respiration.

The disease is named heaves, from the fact that the affected animal heaves at the flanks, or performs what is known as abdominal respiration, by bringing into play the abdominal muscles, for the purpose of aiding the lungs and diaphragm in their work of respiration and expiration.

The best plan of treatment is to let the patient run on the prairies, and give him occasionally phosphate of lime and ginger, equal parts, dose, one tablespoonful. I have known animals with the affection, very much benefitted by a run at grass; also by feeding carrots, and

by sprinkling their food with a small quantity of lime water.

HEAVES OR BROKEN WIND.—This form of malady is considered incurable from the fact that it is of an organic character, depending on rupture of some of the air cells, change of structure and emphysema of the lungs. In this affection we observe a jerking double movement, very laborious and distressing. The animal is a picture of ill health, and when urged to travel fast, soon becomes exhausted and used up. The direct cause of broken wind is over-exertion.

In view of palliating some of the worst symptoms, I should treat the case as if it were one of ordinary heaves. DR. DADD.

TREATMENT OF CHEESE WHEN READY FOR MARKET.—When cheese is ready for market and to be shipped, it is the practice with some dairymen to apply to each cheese a thin coating of varnish made from gum shellac.

The shellac is simply dissolved and applied with a brush. This coating gives the cheese a smooth, glossy appearance, and, besides adding to its beauty, is said to keep the cheese from losing weight or gathering mold. When cheese, well cured and shipped in the fall, are to remain in store several weeks or months, it is claimed the above treatment is particularly beneficial, as serving to keep them in better condition, with less loss, and at the same time adding so much to their appearance as to induce readier sales than when not so treated. We have never made trial of gum shellac for this purpose in our own dairy, but are assured by some of our best dairymen, that its application has been practiced by them with decided advantage; and as gum shellac used in this way is perfectly harmless, we see no reason why it may not be employed for the purpose indicated, especially as decided advantage is claimed from its use.

BUTTER WITHOUT CHURNING.—A French chemist says, butter may be made by passing the watery part of the milk through a filter, aided by evaporation. The milk is put into a bag, where it percolates through; and strings, like candle wicking, reach into it, and thus evaporate the more fluid parts. In a day and a half, or less, nothing but cream remains. This is put into a tight linen bag and worked as one would work dough. In this way butter is obtained.

CURE FOR HOG CHOLERA.—Take dried poke root (*Phytolacca decandra*), 3 oz.; dried root of May apple bush, 4 oz.; saltpetre, 5 oz.; charcoal, 3 oz. Pulverize together, and give in any convenient form, at the rate of one table-spoonful to four hogs, once a day till a cure is effected.

How to Raise Water for Stock.

ED. VALLEY FARMER: I have recently purchased a farm in this county, in which I observed, as well as possible, the directions in your July number on "Buying a Farm." Now, my farm is deficient, in dry weather, in surface water. I have plenty everywhere about thirty or forty feet below the surface. Can you tell me the best mode of elevating this water to the surface for family purposes and for stock.

Kansas City, Mo., Nov. 20, '63. SUBSCRIBER.

[ANSWER.—We know of no better way than by using pumps. There are many kinds of very excellent pumps which will raise the water very rapidly, requiring but little power. Wind-mills are used now on all our railroad lines for elevating water, and if you have the capital to invest in that way you could do it advantageously. But we should make ponds. This is done throughout the prairie regions of Illinois and Missouri, and they afford, when properly constructed, a supply of water throughout the summer for stock. If any of our readers can answer "Subscriber" more satisfactorily, we would be pleased to have them do so. Will not some of our subscribers write an article, giving full directions for making ponds for stock.—Ed.]

THE HORSE

Is a living machine, capable of more or less reasoning, and set in motion not only at our will, but also on his own account. The trainer must, therefore, before he begins to handle it, make himself familiar with the capabilities and peculiarities of both body and mind. We hardly ever find this machine in perfect symmetry—it is not even wanted to have it so; for the English race horse is not symmetrical, but has intentionally, by careful breeding, undergone a change of figure deviating entirely from its ancestors the Arabs. But any such deviation, although it may favor a certain quality, for instance, speed, is the reason that the horse cannot perform other work with equal ease. The body of the thorough-bred appears more symmetrical than it is, because by breeding for the turf the withers have become so high, that it looks as if the shoulders were as high the hips; but the disproportion of the legs strikes any beholder, the fetlock and radius being too long, and the shank-bone too short. If these horses perform great deeds apart from speed, we find the reason in their great muscular power and their small bones, as well as in the lightness of the head and neck. But very seldom will the thorough-bred naturally be a good steeple-chaser, or an agreeable saddle-horse; if he is such he will resemble more or less the Arab, as does also the English hunter, except in size.

—Wilkes' Spirit.

BEST CLIMATE FOR SHEEP.

An exchange paper has the following:

Sheep can stand cold weather without injury if it is dry. Sudden changes and cold rains are very injurious. We believe sheep require shelter quite as much in the South-west as at the North. The weather is not as cold, but is more changeable, and the sheep frequently get thoroughly soaked to the skin. In this condition a raw, cold wind and a damp soil cannot help but carry off much of the heat which is necessary to the well-being of the sheep. The natural heat of the body of sheep (105°), is much higher than that of horses and cattle. This heat is kept up by the consumption of food (or burning of fuel) in the lungs, etc. of the animal. To prevent this heat from flying off, the sheep are provided with a good warm coat of wool. To be effectual, however, the coat must be kept dry. In a cold, dry climate, if the wool gets a little wet on the outside, it is soon frozen, and this acts as a coat of mail, with a good warm lining of dry wool inside, so that the heat from the warm body within does not fly off. It is said that the Scotch Highlanders in olden times when exposed during frosty nights, wet their plaids before lying down to sleep, and by holding them a short time from their bodies they were frozen into a stiff, hard board, sufficiently thick and impervious to defend them from the cold. The slight coat to frozen wool acts in the same way. But in wet weather there is no such protection, and so it is that you will find it equally important to provide shelter in the warm, but wet and changeable climate of the South-western States.

WIND GALL.

A gall is a swelling that appears on each side of the back sinew above the fetlock, and injures the sale of many a fine horse. Many people puncture them, which is a wrong thing, as it often produces an incurable lameness. I had a very fine horse, which was injured by the same thing. I tried many remedies which I saw recommended in papers, and never found one which cured him. In fact found more that injured him than there were that did him good. I at last thought kerosene oil might do him good, so I made the trial. I had not used the oil but a few times, when the gall entirely diminished.

Procure the best kerosene oil possible, and bathe the spot two or three times a day until you see that the gall has diminished. Dip the end of your finger in the oil, and rub it in well. Then put a tight bandage of cloth around the gall. Be careful and not let the oil spread more than necessary, for if allowed to run down in the fetlocks it will cause a bad sore.

If the gall be a bad one, and the oil should cause a sore, heal with Green Ointment, made as follows: Two ounces of beeswax, two ounces of rosin; when that is melted, put in half a pound of hog's lard, and four ounces of turpentine, and to this add one ounce of powdered verdigris, strain through a clean cloth, and it is then fit for use.—[Cor. Country Gent.]



HORTICULTURAL.

[Written for the Valley Farmer.]

A Description of Some of Our Grape Vines.

BY LOUIS L. KOCH, GOLCONDA, ILL.

To describe them in regard to their general qualities, is scarcely possible. A grape vine, excellent and fulfilling all our anticipations in one place, may seem worthless and hardly worthy the labor in a different latitude—nay, even in a different locality in the same latitude; or its deviation may be caused by a different soil, or a different mode of treatment. The form too, or the taste, or color of berries of one and the same sort of grape, may, under the just-mentioned circumstances, appear changed to such an extent as to defy recognition. As an instance, we may take the Catawba grape, the color of which is generally given as a copper red; while in my vineyards, when highly matured, they are of a dark blue, with a most handsome light blue bloom, similar to the German prune. The Diana, again, I find in my most immediate vicinity to have light green berries, and but a trifling amber bloom, while those in my vineyard are adorned with a dark amber, almost a light brown color.

The several diseases of the grape, described in a former communication, and so detrimental to its culture, occasion the very greatest dissimilarity, especially in regard to the utility of one and the same kind. They appear in different degrees of latitude; particularly in localities, however, so destructive or again sparing, that no opinion can be ventured of general validity or application in this respect; and there are but few sorts that consistently prove their good or bad qualities under all circumstances, that they may pass as general or indicative. The taste of the berries too undergoes evidently such an alteration from a higher or lower temperature, as well as from a difference of the soil, and finally, too, from the mode of treatment, (as, for instance, whether trimmed short or long,) that they can scarcely be recognized; and the same sort, which

in one place may deserve the greatest attention, in another will be entirely set aside.

While the difficulty is evident from the foregoing, in order to render a description of the grape or its value as of general application under all circumstances for one and the same sort, it is nevertheless indispensable to find and indicate some criteria among their qualities whereby we identify certain sorts, plain to all, and consequently normative when selecting for new plantations, in reference to the object in view, whether for the preparing of wine or for sale in the form of grapes.

This demand is met indeed by the catalogues of our nurserymen with a circumspection worthy of all regard, so that it will be but my duty in the following description of the sorts I cultivate, or at least of such with which I am sufficiently acquainted, to speak only of such things not already published on this topic; while the conviction alone, that communications of this nature for the columns of the *Valley Farmer* may serve as a measure directory for further preparation than might be accomplished by the catalogues of the different nurseries (seen but by few), could induce me here to advance my experience. As I shall communicate but what I have myself observed, I desire to guard against all errors which, on points already mooted, may apparently scarcely be avoided. My effort was directed rather to draw the attention to the risk, when selecting vines for plantations, not to rely too firmly upon their description in the catalogues, which, although suited to the locality whence they proceed, may frequently prove entirely heterogeneous in reality, or perhaps present their final result as entirely deceptive.

Before I pass to a brief description of some sorts which may easily appear as the only things to be named, I cannot omit to express my sorrow, that as far as my experience (gained from both observation and reading) may reach, the general desire is, rather to raise handsome grapes for the dessert than wine making. Only on the very excellent plantations in and about Hermann on the Missouri river, are great efforts made to obtain a good wine to drink, rather than handsome grapes for table use. I will not deny that a fine dessert grape proffers a precious addendum for our palate, and under certain circumstances, may afford a greater compensation than a wine grape—nevertheless it should ever be regarded as subordinate when we have in view its national use. If I should state all that would go to establish this view, my communi-

eration would grow too capacious. Besides, I regard it incontrovertible. Permit me to draw your attention to the immense advantages secured in a pecuniary sense, and the unspeakable blessings of a physical—nay, I might say of a moral nature—in case we should succeed in preparing wine in this country (by nature richly blest), so as not only to become independent of foreign countries, but enable the man without means to refresh himself, instead of resorting to ruinous drinks. And should even this object not be attained by the present generation, we should prepare the way for those who come after us. A fine dessert grape is undoubtedly an exquisite addition to our fall fruit. The grape must ever be viewed as a handsome gift which Pomona proffers, rather than an indispensable necessity; which latter rank in fact is always awarded to it in all the wine growing countries of Europe.

But how great the blessings are which are disseminated over a whole country, when once one good grape for the press is obtained and cultivated, may be realized by considering this effect in Europe; and if we could here appreciate the introduction of such an one in its influence upon the general good, we cannot over-rate the merit due to him who has brought about the culture of such a grape with the desired results. Already we are favored with such a noble vine in the Norton's Virginia; and Mr. Jacob Rommel, of Hermann, deserves great merit for its introduction. But the Norton's Virginia, with all its unmistakable advantages, which I intend to describe in detail when speaking of the different kinds, might after all be but the forerunner of other nobler sorts which might be realized by great efforts, efforts frequently well compensated too, and thus enrich our collection by the addition of new seedlings. If my assertion should appear one-sided to the reader, and that I am prepossessed in favor of wine grapes, I would state that I merely desire to obtain a balance in its favor. Almost every catalogue have seen, and all horticultural meetings where this subject has been discussed, speak with much greater interest of such grapes as are suited for sale, while the wine grape is mentioned but superficially, and at times not at all. The fact that it is far more difficult and requires much more time to understand the qualities of the latter to such an extent as to be able to recommend its more extensive culture with certainty of a desired result, may contribute largely to this neglect. Besides, the want of a good, pure wine is not yet sufficiently felt in this country, in or-

der to make great sacrifices of money or time for its object. The artificially prepared wines, mixed with sugar and spirituous drink, play too prominent a role, and seem to better satisfy the taste of the public than a wine pressed from the grape. Nay, wine prepared from berries of other fruits, mixed up with sugar, could secure for themselves an unmerited recognition, even among the leaders of our horticultural societies, as for instance, at the distribution of premiums at the Illinois State Fair in 1863, at Decatur, or at the Fair at Rockford in September, 1863, wine from the juice of the grape was estimated of the same value with wines from blackberries, gooseberries, currants and raspberries (\$2 or \$3 for three bottles). I view this as derogatory to the noble juice of the grape, and calculated to discourage culture. A field of blackberries almost without any pains-taking, would accordingly afford more profit in a pecuniary view, as well as in regard to a recognition of the public wants, than a vineyard planted for the purpose of raising wine grapes, of the same dimensions, requiring great labor and perseverance, and often, too, pecuniary sacrifices. I am not saying anything about the pecuniary value accorded to the different wines, but merely of the recognition of the subject. If I would deem the wine I here raised worthy to be sent to an exhibition for the purpose of obtaining a premium, I would look upon its co-ordination with blackberry wine as under-rating wine pressed from the grape, and would deem it a decided means of preventing the transmission of wine samples.

As a proof how the effort to obtain a good wine is valued and recognized in Germany, where the culture of wine has to contend with infinitely less difficulties, I take the liberty here to quote the fact, that at the banquet given in honor of the Conference of Princes, held in Frankfort in 1863, the Raunthaler wine of 1856, which received the premium in February, 1861, at the Exhibition in London, was paid with \$12 a bottle. What a character a bottle of blackberry wine would have cut by the side of it, we omit to notice.

If we sum up the great pains, the amount of labor, the frequently heavy sacrifices in a pecuniary view which the grape requires from its seed to the plant, further to the fruit, and lastly to the final result—to wit: the well corked and sealed bottle—he who subjects himself to all these manifold duties with indefatigable constancy, and that, too, often by his own hand, is entitled to a higher appreciation of his useful efforts than has been accorded to him hitherto. I have heretofore avoided to appear before the public with my wines. I found and do still find no impulse to do so, and am perfectly satisfied if my wine will be valued by but few—though such as are connoisseurs; a fact I merely mention so that my views here expressed may be free from every appearance of egotism.

THE DEVEREAUX GRAPE.

ED. VALLEY FARMER: I notice in the December number of the *Valley Farmer*, Notes on Grapes, by Geo. Husmann, in which the Devereaux grape is mentioned as seen at the National Garden, Washington. The same grape was exhibited before the St. Louis and the Meramec Horticultural Societies, eliciting universal admiration for its size of bunch and quality of berry.

The question has been frequently asked, what is the Devereaux grape?

Mr. Wm. N. White, of Athens, Ga., in his "Gardening for the South," published in 1856, classes it among foreign varieties (p. 399); after describing Delaware County (the Delaware of today) as a foreign variety, says: "Devereaux, the best foreign grape for open-air culture; bunch about six inches long, shouldered, making them some three inches broad at the base; berries generally with one seed; medium round; very compact or crowded on the bunch; skin thin, black and covered with a blue bloom; flesh juicy, with a brisk, agreeable flavor, much better than the native grapes. A great bearer, and free from rot. Ripens middle of August."

In a private letter to Dr. Grant, dated August 20, 1859, and published by Dr. Grant in his invaluable catalogue, third edition, Mr. White says, p. 15: "We must now fully admit that you were correct in your supposition that Devereaux would be found to be the same as Lenoir; or rather that there is really no Devereaux in existence as a distinct grape. So the synonyms of Lenoir are as above—Devereaux, Thurmond's, Lincoln, Black Sauvignon and Sherry."

Dr. Grant, in his seventh edition of Illustrated Catalogue, re-written, says: p. 9, under the head Lincoln: "This variety for a time lost its identity in confusion among a great many names, but was at length by the pomologists of Georgia, declared to be no other than the Lenoir, changed in consequence of location and culture; but more accurate observation has shown them to be quite distinct. As we have them at the North, they are easily distinguished by their leaves, those of the Lincoln being nearly round, and those of the Lenoir deeply lobed. Both have nearly the same rich, spicy, vinous flavor, much more sugary than the Herbemont, which is of the same excellent family. Lincoln is a little earlier, as well as more productive than the Lenoir, and equally certain in its crops. In habit it is short-jointed, with an

abundance of healthy foliage, by which it is well adapted to the garden and vineyard."

We may, therefore, say that the Devereaux of the National Garden and the Lincoln of Dr. Grant are identical, and that from our experience with the other members of the family—Lenoir, Herbemont, &c.—they will in our climate require a slight winter protection when grown in the open air. WM. MUIR.

St. Louis Co., Mo. Dec. 6, 1863.

PREPARING AND PLANTING APPLE SEEDS.—The *Farmer's Oracle* gives the following directions for planting apple seeds:

"As much difficulty occurs with amateurs in getting up apple and other small seeds of trees and shrubs, we append our experience which proved a success.

"Soak your seeds for twenty-four hours, or more, in warm water. Mix thoroughly with treble their bulk of moist earth; place it in a shallow box with cracks in the bottom, and sink this box level with the surface of the earth, covering the top with two inches of soil, and thus let them remain till spring. As soon as the ground is fit to work in the spring, plow, harrow, and otherwise make your ground mellow and level, pulverizing all the lumps. Rake off smooth, as for onions. Put down your line and dig a drill two inches deep under it; take out your seeds and sow in the drill, covering them about two inches, by making a little water course along near the seeds. Pat the loose earth along the row with your hoe, and keep the ground moist, and the young trees will be up in from two to three weeks.

HORIZONTAL TRAINING OF GRAPES.—We stated a short time ago that downward-growing limbs should never be lopped off. We see it now stated that vines trained in the same way, or horizontally, increases the crop: that it has a most decided benefit. The experiments have been made in Europe for several years. We shall test the matter carefully, and hope our readers will do the same. In Europe, grape vines that wouldn't bear, were made prolific, and uniformly so. It is accounted for this that the sap follows the more readily the law of gravitation than when restrained by it. And this looks reasonable. Our finest Spitzenbergs this year grew on limbs of this nature. The reader doubtless will recall to mind that on the most pendant branches, often but mere threads, the finest, heaviest fruit is grown. So evident was this that it led us to pen a paragraph (in the Nov. No.) on the subject.

A Cincinnati's Visit to Mr. J. Knox's Extensive Plantations.

Some time ago, Mr. John A. Warder (one of the most distinguished pomologists in the United States) of Cincinnati, paid a visit to Mr. J. Knox's horticultural grounds and vineyard, and on his return home he made a verbal report of what he had seen to the Cincinnati Horticultural Society. The Society were so highly pleased with the remarks of Mr. Warder, that they passed a resolution unanimously requesting him to make a more lengthy and written report. On Saturday morning last, Mr. Warder read the following report to the Society:

D. B. Pierson, President of the Cincinnati Horticultural Society:

In accordance with an order and custom of our Society, I proceed to render some account of what I have met with of interest while absent on a horticultural excursion.

Having recently enjoyed an opportunity of inspecting the plantations of Rev. J. Knox, in the vicinity of Pittsburgh, Pa., I proceed to give you some account of his admirable management and of his wonderful success. The experiments of Mr. Knox have demonstrated that he has an excellent soil and situation for fruits, especially for grapes and strawberries, and also that he has known how to take advantage of his favorable surroundings so as to bring about the most admirable results.

The situation is on the high rolling land south of the Monongahela river, above which it is elevated between four and five hundred feet. The slopes incline variously, but those looking to the South and West are chiefly selected for grape planting. The soil is a clayey loam, with a liberal intermixture of sandstone, but also has lime enough to impregnate the percolating water. In some places the fissile sandstone constitutes a larger proportion of the soil. This is particularly the case on Troy Hill, Reserve township, north of Allegheny City, where there are numerous vineyards covering nearly one hundred acres, some of which are very precipitous, hanging upon the southern and eastern declivity, supported by massive walls of sandstone, built at great expense.

In other places, the tenacious light colored clayey sub-soil of this region, approaches the surface, and intermingling with the soil, makes a strong clay. In such situations underdraining is very desirable.

PREPARATIONS.—The plow, followed by the sub-soil lifter, has been found by Mr. Knox to be all sufficient for comminuting this soil.—With a strong pair of horses to the plow, followed by two pair of oxen to the lifter, he is able to work about one-third of an acre per diem. This process is performed in the autumn. The ground is next cross-plowed with the same implements, going deeper, and a third plowing is done in the spring before planting, so that the soil is thoroughly prepared, being stirred at a depth of from 15 to 18 inches.

The vines are of summer's growth, from single eyes that are started in Mr. Knox's extensive propagating houses in the spring, and set out in well prepared soil about the first of June,

for the summer's growth in the open air, which gives them very fine roots, and substantial stocky tops. From this soil they are carefully lifted with their abundant fibers, and are planted in the vineyard ground, with their roots carefully spread out in every direction. Sometimes a portion are planted in their stations from the pots directly from the propagating house, instead of spending a summer in the nursery, but such are not considered to be so good, though a season is gained by this plan.

The distance between the vines is six feet in rows that are eight feet apart; this is for trellis training upon the renewal system. A small stake is set by each plant, to which the shoots are tied. Instead of cutting the little vines back to two eyes, only the feeble wood at the ends is cut off, leaving several buds on the larger plants, and as these grow the weaker are rubbed out and only the strongest allowed to remain. The reason for this is evident—it is to insure against accidental injury to the prominent buds in handling the plants. During the summer the shoots are tied to the stakes, and the next spring they are cut back to two eyes to force out two strong canes, which are tied up and trimmed of their laterals for three or four feet. In strong vines a third cane is sometimes allowed to grow the second season, the object of which will appear presently.

Training on the trellis commences with the third season of the vineyard, when the stakes are dispensed with. Posts are planted in the rows that run north and south, about twelve feet apart; to these, strips of board, three or four inches wide, are nailed a foot from the ground, and seven feet above it, these are the rails to which the upright strips, about an inch square and eight feet long, are nailed. These are placed nine inches apart, from centre to centre. The vines are trimmed this spring so as to form the two arms, each three feet long, from which the fruiting canes are to be produced. In a very strong vine, that had been allowed to produce three canes the previous summer, the third shoot is trimmed to three or four feet for fruiting, and tied upright to the trellis bar nearest the vine stock, while the arms are secured to the lower part of the trellis. As the buds on these last break, they are thinned out by rubbing off a portion, so that only the strongest are left, and these are so arranged that one of them can be trained to each of the upright trellis bars, each arm, eight to each vine. This we should think a tremendous amount of wood for the third summer, but with the soil and treatment to which they are subjected, many of the varieties of grapes require assiduous labor to confine them to the number of shoots, which reach the top of the trellis, and most of the canes also bear a good deal of fruit. Mr. Knox feels confident that his Concord vines will average ten pounds of grapes the third season.—Some other varieties, such as the Taylor or Bullitt, and Herbemont, grow as vigorously, reaching the top of the trellis, and then stretching along horizontally for some distance; but some kinds do not cover the trellis the first year it is set up. These canes produced from the

arms are divested of their laterals during the summer.

The renewal system of trimming is adopted in these trellises, with some modifications, by adopting the spur pruning when necessary, as will be indicated below. In the fourth season from planting and always afterwards, every alternate cane is cut back to two eyes, while the other is shortened, according to its strength, and tied vertically to the trellis for fruiting; the spur produces a new cane, so that one spur supports fruit and the other produces wood. If it happen that the cane of last year is not strong enough for the fruiting, it is cut back, and that which bore the previous year has its fruit-bearing laterals trimmed to spurs for fruiting, in its stead. In this way, by judicious management, the whole trellis is kept covered with fruit from year to year, and the amount produced is really astonishing, as an instance, I may cite twelve Hartford Prolific vines, which are four or five years old, that produced 620 pounds of fruit this year, from which \$125 was realized—apply this to an acre, which supports about 1,000 vines, as planted six feet by eight, and we may calculate the proportionate yield at fifty thousand pounds of fruit, this at the low price of five cents a pound would produce \$2,500 per acre! an incredible yield; and one justifying a large annual outlay in assiduous care and labor.

THE STRAWBERRY BEDS.—After setting the grapes in their stations in the vineyard, Mr. Knox plants the eight feet spaces with three rows of strawberries, eighteen inches apart, the plants being separated from ten to twelve inches; the whole surface is kept perfectly clean with the hoe during the summer, and the runners are trimmed off as they make their appearance. By this means the plants become very stocky and strong. At the approach of winter the beds are covered with clean straw, which protects the plants from freezing and thawing, as a winter mulch. The new leaves and flowers come through the straw in the spring, the fruit is protected from the dirt, and the whole crop is mulched by the decaying straw during the summer. By this means the most wonderful crops of magnificent berries are produced—such, indeed, as must be seen to be realized. The method of shortening in by cutting off the runners, in combination with adaptation of the soil and high culture, makes even the staminate-bearing varieties abundantly productive in his hands. Such kinds as under ordinary treatment are considered shy bearers, producing only an average of ten perfect and well sized berries to an hundred blossoms, are here made to yield 75 per cent.; but the stools are so strong, having so many points of inflorescence in each crown, that the aggregate of fruitage is much larger even than the percentage of fruit-producing flowers would make it appear to be.

Thus, in the numerous counts, very carefully made upon the ground last June, I reached the following results: One plant of the Wonderful produced 358 blossoms. A plant of the Bonte St. Julien had 84 blossoms, which yielded 67 fruits, or .80. Kitley's Goliath had 64 per cent. of fruit; Trollope's Victoria, 52 per cent.; and

all of these varieties are considered strongly staminate, and, with the usual culture, they barely yield 10 per cent.

A very extensive investigation by counting in the case of the Triomphe de Gand, gave less than 42 per cent. of the blossoms yielding perfect fruit, and yet, so numerous were the flowers on these plants, that the number of resulting fruits was very great, being nearly fifty on several plants; whereas, with common field culture on our soils, this beautiful fruit had proved itself unworthy of culture from its unproductiveness, many plants having no fruit whatever, succeeding a plenteous blossoming.

The enterprising proprietor of these grounds is eminently a believer in progressive horticulture, and spares no expense in procuring new kinds that have promising characters. Among the hundreds of varieties that have been tested by him, he especially recommends the Triomphe, Golden Seeded, Hericart, Fillmore, Victoria, Wilson. Of newer sorts, the Russell, and a plant numbered Seven Hundred, possess admirable qualities, and prove the possible development of this fruit in a remarkable degree.

But to return to the grapes, the object of more immediate interest at this season of the year. You will expect to hear something of their appearance and of the varieties in cultivation.

In the first place, the vines presented an aspect of perfect health and vigor; excepting a slight injury from hail, they seemed to have enjoyed complete immunity from all the ills that vines are heir to; no insect depredations, no mildew on the foliage or canes, no rot on the fruit, which was perfect, except in a few instances where they suffered from over-production, and that was only apparent in deficient coloring. Though the neighborhood had been visited by some severe frosts, the foliage was still beautifully green and abundant upon some of the trellises, and ripening into rich tints of yellow upon others, with a slight frost scorching on the Isabellas; and only the foreign varieties, and some of the very earliest ripening sorts of the natives had cast their leaves and looked bare, on the 20th of October.

The show of fruit was the most magnificent I ever beheld—the quantities enormous, the appearance smooth and fair, the color rich, with perfect bloom; it would have been enough to excite the poetry of a man's nature, if it were not too deeply buried beneath the facts and figures of a severe investigation, such as that in hand at the time of this visit.

Mr. Knox has thrown himself into the culture of fruits most heartily, and with the greatest liberality he has purchased plants of every kind of small fruits that promised to be worthy of culture. Hundreds of strawberries have been tested upon his grounds, all the currants and gooseberries, the various raspberries of modern catalogues, the blackberries, and lastly, in order of ripening, the grapes, have been subjected to the test of fruitage. No expense is spared in procuring the varieties that are said to promise well, and many of them have already been made to yield their increase under his assiduous care.

I propose to transcribe a few of the remarks made upon my note paper while passing over the grounds, among the vines, but shall not describe all the varieties in cultivation. The first varieties planted were of the Isabella and Catawba, the kinds then generally cultivated.—Both of these are bearing abundantly, the former heavily laden, but not at all the richer for its treatment here, being, as in other places, flat and insipid in comparison with other sorts. The latter less deeply tinted than in more southern latitudes, but producing a magnificent crop of splendid bunches of beautifully perfect fruit.

The Concord was in full vigor, covering the trellis to the top with foliage and fruit—a perfect show. The bunches are not uniformly so large as we sometimes see them, nor are the berries equal in size to the stereotype illustrations on nursery-men's catalogues, but the skin is thin, the pulp melting, the juice sweet and abundant, and though the flavor be somewhat musky, not to say foxy, or as some salesmen expresses it, of certain varieties, "with a characteristic native aroma," still it is the favorite of the people, and is selling freely at double the price of the Isabellas and Catawbas offered in the markets. Indeed for general planting at every man's door-stone, throughout the country, this hardy, vigorous and productive variety, apparently free from all the ills of grape vines, has the highest claims to universal favor. Still, some of us may be allowed to have our preferences for a table grape. For wine, the Concord has begun to assert its claims, and a few samples have already been presented to the connoisseurs, who have pronounced it a promising red wine. A good deal of it has been made at Hermann, Mo., this year, and Mr. Husmann writes me that the must weighs from 85 to 90.

Next is the Diana, which is vigorous and productive, the bunch compact, the berry of beautiful color, tough skin, and rather firm pulp, juice sweet, and having a peculiar flavor, which has been called "feline." The thickness of skin enables this grape to be kept a long time, so as to be on sale in the Christmas holidays—when it commands a high price. The wine from this grape is very highly flavored with the aforesaid feline, and though peculiar, and at first perhaps repulsive, it strangely grows on one's affection: it will be valuable for mingling with the juice of some other grapes of less decided character; the Delaware itself has been suggested as one that might borrow piquancy from the Diana.

The Delaware has succeeded admirably in this vineyard, where it has been extensively grown, and with such success as to induce much further planting. Mr. Knox has several acres now in course of preparation for vineyard, and extended nursery rows of the vines produced this year, stand ready to be set in their future stations. Whatever complaints may be made of this variety elsewhere, and some of us have had our troubles with the slender little things for which we have paid our money, this vine appears to find a congenial soil upon the coal measures of the Monongahela hills. Three year, old plats have made a splendid growth of

firm, close-jointed wood, and in many cases the vines have completely covered trellis, and run along on the top—several shoots were seen of at least twelve feet in length, and in most cases there were more than the regular apportionment of eight canes to the vine, as well as an abundant crop of fruit. This grape has attained so much attention of late years, and is so familiar to the horticulturists of our country, that it is not worth while to describe its beautiful clusters of transparent, rosy berries—thickly spread along the vines. The wine is attracting great attention, and \$5 per gallon has been refused for that made by Mr. Mottier, near our city, who has had perfect success in growing this grape here. The weight of the must with him in September was 102—Mr. Werk's (probably the first run) weighed 108. The wine sells at \$24 per box or dozen. The vines, once established, bear most abundantly, and the luscious fruit is only too sweet for most palates, as a table grape, and to be eaten as honey rather than as food. The fruit sells at Pittsburgh for fifty cents a pound.

The Union Village is also a quite successful grape with Mr. Knox; on account of its great size and fair quality, it commands a high price, bringing fifty cents a pound. The vine is vigorous and productive, but the fruit is too much like the Isabella to give much encouragement to wine-growers; it is essentially an amateur and market fruit. The excessive growth of the canes on this vine renders it somewhat tender, but I did not hear any complaints in this regard where the growth is diffused upon the trellis, as the canes are not then so rank.

The Herbemont showed all its vigor and greenness of foliage even at this late date, making a perfect screen of the trellis, and the numerous large clusters, thickly packed with the delicious, vinous, dark-colored berries, were almost concealed from view. This vine is somewhat tender, and the canes, like those of the Diana, are taken down and covered with earth in the winter, but the fruit is so spicy, and so free from pulp, that it is fully appreciated by the proprietor, who rates it among the best table grapes. Its qualities for wine are well known here. The must this year weighs 101.

The Elsinboro, an old variety but not generally cultivated, is a prime favorite with Mr. Knox, on account of its hardness, productiveness, and the rich sweetness of its small, dark-blue berries, with red juice; the bunches are rather large, loose and shouldered. The grape is desirable for table and for wine.

The Hartford Prolific is an early variety, ripening its fruit for market early in September. The vine is hardy, vigorous and very productive, yielding more than fifty pounds at four years. The fruit is not first-rate, but very desirable for market. The berries do not drop, as reported heretofore.

The Creveling is winning favor wherever known. The vine is vigorous, hardy, and promises to be productive. The bark and leaf-stalks are very red; the foliage is smooth, the angles pointed, deeply lobed and healthy. The bunch is loose, the berries rather large and blue, soft

and melting, rather sweet—a fine market variety; ripening at Pittsburgh August 24, it makes a fine market fruit.

The Tokalon is moderately vigorous, but does not appear to be very productive. The foliage is good, healthy, angular, pointed and pubescent. The bunches are not large, loose, and the berries are rather large, blue, soft, and melting. They hold tenaciously to the branch, which makes this grape desirable for late use. It is sweet and not musky; quality from good to better—a table grape. Though well favored enough, it can scarcely be said to justify its cognomen, which means, emphatically, The Beautiful.

The Blackstone and the Louisa are evidently seedlings of the Isabella; which they resemble in so many particulars that their identity with the latter might well be suspected.

The Oport is sufficiently vigorous and healthy, tolerably productive, but the bunches are not large; it may make a good red wine, but is not desirable for table. The same remarks will apply to the Bogg's Island, which has smaller bunches, and medium sized, dark blue berries, with a peculiar astringency; indeed it resembles our Worthington grape in its slender wood and thin, smooth foliage. The fruit of Bogg's Island also colors early, but is not ripe until after it has been frosted.

The Alvey is only moderately vigorous, rather slender, and does not appear to ripen its wood perfectly; the foliage is rather small and persistent; the bunches are small, loose and shouldered, with small, round, blue berries that are soft and juicy, with a brisk acid flavor, promising well for wine; it ripens from September 15 to the middle of October.

The Canby's August, probably the Royal Madeira, has vigorous, hardy, brown wood, with good roundish leaves, somewhat pubescent.—The bunches are small and loose, bearing round, blue berries of medium size, which are sub-acid, and of indifferent quality. This is only a market fruit ripening the end of August.

The August Pioneer is a very foxy grape, having vigorous, red, pubescent wood, with round and very pubescent leaves. The bunches are small and loose, with large blue berries, that are very pulpy, round and dry, sweet and foxy, indifferent and "fit only for market," ripening August 20.

The Mary Ann is of similar quality, having vigorous brown canes, furnished with healthy, roundish, large and very pubescent leaves.—The bunches are rather small and loose, with large, very dark, oblong berries, that are very firm and pulpy, as well as very musky, and of poor quality, ripening early in September. These grapes are unworthy of cultivation, and may be classed with the native Amber, Northern Muscadine, Charter Oak, Wild Fox, *et id omne genus*.

Since there is a great desire with the public, and especially with amateurs for white or light colored grapes, they may now be gratified by cultivating several varieties of this character.

The Taylor or Bullitt is one of the most promising of this class. The wood is very vigorous,

but slender, and of a brown pale color, with some bloom, the joints are rather long, but the canes exceeded the height of the trellis. The foliage is good, angular, serrated and smooth. The bunches upon these young thriftily growing vines, were small and compact, crowded with rather small green, amber-colored red, and dull red berries, which are melting and juicy, slightly pulpy, with sub-acid to rich sweet; a very good table grape, ripening September 20.

The Anna is but moderately vigorous in its canes, but they are firm; the foliage is small, pubescent and disposed to curl and fall. The bunches are scarcely medium and rather close; the berries are from medium to large, round, of a whitish amber color, covered with a thick, white bloom; they are juicy, sweet, aromatic, but the skin is thick and the pulp firm. This is only an amateur variety, ripening the end of September.

The Rebecca and the Cuyahoga have higher claims for our praise, being more refined and delicate. Both of these are desirable amateur varieties, the former rather bearing the palm of excellence in the opinion of most judges.

These are some of the varieties that are now being subjected to the test of fruitage by Mr. Knox.

PROPAGATING HOUSES—These are very extensive, and admirably arranged for the production of grape vines, of which enormous quantities are started annually, and set out in nursery rows to become vigorous stocky and firm, quite different from the slender, drawn-up specimens that have been nursed in pots, under glass, all summer, and then exhibited at the fairs for the premiums of societies and the praises of the public, which latter is often made to suffer disappointment when planting such puny things as have been too often furnished to them. Hence, a prejudice prevails against the plants that are propagated by artificial means, with bottom heat, which should not be referred to the means of propagation, but to the fact that feeble wood has been used, perhaps, and still more to the improper treatment of the young plants, which have been crowded and drawn, and which have had their roots pot-bound, from want of space to expand and multiply their fibers, as they can only do in the well-prepared open soil of the nursery. According to the best modern views of vegetable physiology, the single eye or bud should make as good a plant as the longer cutting. There is no ground for the prejudice existing among vine planters against these plants from single eyes, unless it be from the fact that some propagators fail to make vigorous plants from a want of knowledge as to the proper treatment of the vines during the summer. Too often they are made to grow as tall as possible, without regard to the stockiness and vigor of the plant.

In conclusion, allow me to reiterate the delight that was experienced in visiting these favored vineyards. The success of others should give us pleasure, even where the contrast with our own less productive vineyard is sadly against us. Let us not despond, however, but try again; and hope for better results in future years, with

our renewed efforts to win success. Respectfully submitted,
JOHN A. WARDER,
Cincinnati, Oct. 30, 1863.

DOMESTIC WINES.

The great difficulty with our domestic wines is, the sugar is bad. People generally use the cheapest kind. This will, of course, add its bad flavor, which cannot be endured by a delicate taste. All the ingredients should be pure, and no vitiated tang permitted. Our domestic wines, such as we find them, are unsuited to a weak stomach. This we have thoroughly tested. Pure wines, on the other hand, are tonic, and impart vigor and warmth to the system without the bad effect of spirits, which at best are but a stimulant. Avoid domestic wines unless carefully made with the purest ingredients. Then they are passable, no more, for a perfect wine must have a wine sugar, a grape flavor; in a word, must be the nutritive quality of the grape itself, for wine is but this quality preserved—so that when a man drinks wine, the pure vintage, he but partakes of the grape in its pure, ripe state. If the grape has a good flavor the wine will have; if foxy, the wine will be foxy. How then with currants and rhubarb, and the many acid and other fruits that are used, and made with cane sugar, which is as distinct as day and night from grape sugar. The one makes alcohol (in wine), the other vinegar. Is the grape taste in such fruits? Far from it. And yet the great majority of people expect this—expect to find grapes in currants, and as good wine in rhubarb as in Catawba, or at least real wine. Domestic wines at best, are but endurable, or passable, as we have said. As we generally find them, they are execrable, hurtful. The pure grape, preserved (in wine) is entirely a different thing. That is wine. There is then a great distinction to be made for health as well as taste. Good wines can hardly be too abundant; but the common "wines" which flood the country—be not tempted by them. G.

Training Grape Vines to Stakes.

ED. VALLEY FARMER: In your last volume of the *Farmer* you published a series of most valuable articles on the cultivation and general management of the grape on trellises. There are many persons about starting vineyards who would prefer the stake system of training vines; and I also believe that some kinds of vines do better on stakes than trellises. There is no doubt that you would benefit many of your readers and help the cause by publishing the *modus operandi* of training, and general management of the grape vine on stakes.

Peevely Springs, Mo.

J. BARR.

[Will some of our readers who are adopting this method of training grape vines, oblige our correspondent by telling him all about it.—Ed.]

Illinois State Horticultural Society.

ALTON, Tuesday, P. M., Dec. 15, 1863.

The Society being called to order, committees were appointed to report on fruits and wines, of which there is a large and interesting assortment, although their exhibition is never made a special matter at the winter meetings.

Dr. Andrews on behalf of the Treasurer submitted a report of the financial condition of the Society, showing a balance in the treasury of \$116.17.

Mr. Flagg, the Corresponding Secretary, reported that he had received some forty answers from thirty-six counties, in reply to a circular sent out through the State, asking for lists of tried and approved fruits, and asked the reference of the same to the Executive Committee, and if approved, farther time to complete his work. So voted.

The limits of Northern, Central and Southern Illinois, the choice fruit districts of the State were fixed as follows:

Northern Illinois—All that portion of the State lying north of the Logansport, Peoria and Burlington Railroad.

Central Illinois—That portion of the State lying between the above road and the Alton and Terre Haute Railroad.

Southern Illinois—All south of that road. These divisions, although somewhat arbitrary and strictly correct, were deemed the best practicable, until the soils, &c., of our State have been more thoroughly known and described.

On meeting, Mr. Galusha submitted the following resolution, which was unanimously adopted:

RESOLVED, That a committee of three persons for each district be appointed to report apple lists for market, family use, and trial.

The President appointed the following committees under the resolution:

Northern—O. B. Galusha, A. R. Whitney, C. W. Murtfeldt.

Central—E. S. Hull, J. H. Stuart, C. R. Overman.

Southern—G. H. Baker, W. C. Flagg, P. R. Wright.

PEACHES.

A very interesting essay on the peach, &c., was read by Dr. Hull, of Alton.

After noting that the best locality for the peach must be one nearest fulfilling the conditions of its original habitat; that treatment must vary with the amount of light and heat (the two important agents of vegetable growth); that whilst the origin of the peach was generally ascribed to Asia, that there was some reason for believing that the creole sorts of the South were indigenous; the identity of the peach and nectarine, and of the divisions of the peach into 1st, rough and 2d, smooth skinned free; and 3d, rough and 4th, smooth skinned cling; into 1st, globose 2d, crenate, and 3d, serrate-leaved varieties with 1st, large, and 2d, small flowers; he devoted the remainder of his essay to considering the importance of the tap root of the peach in its culture. The tap root of the peach designated it as a deep feeder. Hence, in planting, the ground for the peach should be moved to the depth of at least three feet. If holes were dug he would make them five feet in diameter, and would add a wagon load of manure to every six or seven trees. In pruning, special attention should be paid to leaves. The leaves of the improved varieties are fewer and must be cared for, especially at the ends of limbs. Plant trees three or four inches deeper than they came from the nursery, to avoid the borer. The two conditions of success are:

1. Deep planting. 2d. Right pruning. The following is Dr. Hull's list of peaches in the order of their ripening: 1st. Serrate Early York. 2d. Haine's Early Red. 3. Large Early York and Crawford's Early. 4th. Bergen's Yellow and Old Mixon Free. 5th. George IV and Crawford's Late. 6th. Late Ad-

mirable and Columbia. 7th. Smock. 8th. Heath Cling.

Mr. N. J. Colman said he would plant Clings such as Old Mixon, Old Newington and Washington.

Varieties were somewhat discussed. Hale's Early has been fruited by Mr. Baker, of South Pass, who finds it six or seven days earlier than any other variety. Serrate's Early York was much complained of by South Pass men as rotting badly.

Early Tillotson was highly approved by Mr. Huggins and Mr. N. J. Colman. Disapproved by Dr. Hull.

Troth's Early is highly recommended by Messrs. Hadley, Baker and others.

The Society then adjourned to nine o'clock Wednesday morning.

WEDNESDAY, Dec. 16, 1863. 9 A. M.

The committee to whom was referred the President's address, reported in favor of the recommendations therein. 1st. The need of formation of local Horticultural Societies. 2. The commendation of the generosity and efficiency of the Rockford Horticultural Society at the late Fair. 3. An examination into the reported existence of a silk worm feeding on the allanthus. 4th. A condemnation of the course of certain railroads that have refused to give the members of this Society facilities for attending their meetings.

A committee consisting of Messrs. Overman, Earle, Flagg and Minier were appointed to memorialize such roads on the subject.

Committee on Apples for Northern Illinois, reports:

MARKET—Red Astrachan, Car Red June, Keswick Codlin, Early Pennock, Sweet June, Pomme de Neige, Bailey Sweet, Maiden Blush, Fall Swaar, Lowell, Striped Gilliflower, Ramsdell Sweet, Yellow Silb, Crab Wine Sap, Rawles' Janet, Domine, Jonathan, Willow Twig, Gilpin, Minkler, Tallman Sweeting, Yellow Belleflower, Northern Sweet.

FAMILY USE—Early Harvest, Car Red June, Keswick Codlin, Benoni, Hocking, Sweet June, Pomme de Neige, Bailey Sweet, Maiden Blush, Fall Swaar, Aut, Strawberry, Holland Pippin, Lowell, Rambo, Striped Gilliflower, Dyer, Mother, Haskell Sweet, Yellow Silb, Crab, Fulton, Wine Sap, Rawles' Janet, Domine, Jonathan, Willow Twig, Yellow Belleflower, Tallman Sweeting, White Winter Pearmain, Westfield, Seek-no-further, Roman Stem, Northern Spy, Ramsdell Sweet, Swaar.

TRIAL—Kirkbridge White, Duchess of Oldenburg, Fall Orange, Northern Sweet, Fall Wine, Montreal Beauty Crab, Transcendent Crab, White Pippin, Par. Win. Sweet, N. Y. Pippin, Tompkins County King, Hubbardston's Nonesuch, Broadwell, Newton Pippin, R. L. Greening.

PEAR BLIGHT.

Dr. Long read a paper on his experience with fire blight, which has been peculiarly unfortunate; believes poor grass land best in his locality.

Dr. Schroeder has found blight in and out of grass land on drained and undrained lands in all exposures. Trees in stiff loam were not so much diseased as in loose soil. Seedlings bearing small winter fruit do better. The blight is a skin disease like itch.

Mr. N. J. Colman believed the blight inherent.

Mr. Bryant thought no progress had been made in remedying the blight. Had experience with it under every condition. Had noticed trees generally died with the beginning of bearing.

Dr. Andrews regards the proximate cause of blight as defective organization.

Mr. Galusha would sow ground with oats in summer to check late growth of pear.

A committee of three from each district was appointed to report lists of market, family and trial pears:

Northern—R. Douglas, Arthur Bryant, C. N. Andrews.

Central—C. R. Overman, G. W. Minier, E. S. Hull.

Southern—G. H. Baker, Parker Earle, W. C. Flagg. The committee on apples for Southern Illinois made the following report:

Market—Early Harvest, Red Astrachan, Caroline Red June, Yellow Belleflower, Winesap, Rawles' Janet, Newton Pippin, Pryor's Red, N. Y. Pippin.

Family Use—Early Harvest, Large Yellow Bough, American Summer Pear, Rambo, Yellow Belleflower, White Winter Pearmain, Pryor's Red, Newton Pippin, Rawles' Janet.

Trial—Yellow June, Sine-qua-non, Porter, Rome Beauty, Willow Twig, Nickajack.

The committee on Apples for Central Illinois reported as follows:

Market—Early Harvest, Golden Sweet, Bailey Sweet, Maiden Blush, White Win. Pearmain, Domine, Winesap, N. Y. Pippin, Willow Twig, Rawles' Janet, Newton Pippin, upon rich limestone soils, and with high cultivation.

Family Use—Yellow June, Early Harvest, Sweet June, Red Astrachan, Keswick Codlin, Golden Sweet, Ramsdell Sweet, American Summer Pear, Benoni, Car Red June, Maiden Blush, Fall Wine, Buckingham, Bailey Sweet, Fulton, Hubbardston Nonesuch, Aut. Swaar (of the West), Pomme de Neige, Domine, Jonathan, Pryor's Red, Swaar, White Winter Pearmain, Roman Stem, Peck's Pleasant, Esopus Spitzenberg, Winesap, N. Y. Pippin, Rawles' Janet, Newton Pippin, Orley, Lady Apple.

Trial—Early Joe, Downing's Paragon, Rome Beauty, Ladies' Sweeting, Sweet Romanite, White Pippin, Nickajack.

Adjourned.

WEDNESDAY, Dec. 16, 1863, 2 P. M.

The apple lists of Northern, Central and Southern Illinois were adopted with some trifling amendments.

An essay on the blackberry and its cultivation was read by N. J. Colman. After premising that the blackberry had received but little attention until the last few years, and deserved from its excellence, productiveness, and easy culture a much more general planting—he named the New Rochelle or Law on as eminently the best. The Dorchester he found far inferior. Newman's Thornless, fruit as, and the so-called white blackberry, very inferior. The soil should be very rich, and deeply and thoroughly prepared. Plant in fall in rows eight feet apart and two feet in the rows. Cultivates thoroughly first year. Keep down weeds with a hoe second year and permits the plant to form a hedge along the row, cutting out the suckers between the rows with a hoe—cuts off canes of the year's growth at four and five feet in summer with a corn knife. In this manner with small expenses he raises large and fine crops of blackberries.

Mr. Booth said he had met with excellent success by manure highly on the surface and tying the tops of canes together along the rows with osiers. The present year picked ripe berries from the 4th of July to the 6th of Sept.

An excellent essay on the cultivation of forest trees was then read by O. B. Galusha, of Lisbon, Kendall county.

Mr. Galusha went into elaborate calculations showing the economic value of the timber raised, as well as the great benefits to crops, stock, and the general comfort that would result from a general system of windbreaks on our large prairies. He named as his preferred evergreen for such purposes the Norway Spruce, and among deciduous trees perhaps the White Willow.

Mr. Shepherd of Hennepin, Putnam county, submitted a report of an experiment made by him last spring with the sap of the Acer. Negundo, ash-leaved maple, or box elder, which he found to be as good for sugar making, perhaps, as the sugar maple.

Mr. Husmann, of Hermann, Mo., read a highly interesting essay on American wines, detailing the process and giving the results of experiments in making wines from various varieties of grapes of which Mr. Husmann cultivates a large number.

An essay or rather an informal lecture on vegetable gardening was delivered by Dr. Schroeder, of Bloomington, whose original views and humorous expressions elated and edified his audience. At the close of the Doctor's prelection, the Society adjourned.

7 O'CLOCK, P. M.

Mr. Bragton read a biographical sketch of the late Dr. Kennicott, whose death during the past year has left a vacancy not easily filled in the ranks of Agriculture and Horticulture.

Mr. Bryant, of Princeton, then read an eulogy of Dr. Kennicott, whose well chosen language and thought impressed the fact that his hearers were listening to a brother of our first American poet.

An essay on Green House Culture, by Edgar Sanders, of Chicago, was read in his absence by Mr. Starr. It was plain and practical, and breaks ground in a direction yet unattempted we believe by the Society.

The committee on pears for Southern Illinois made the following report, which slightly amended, is as follows:

For Market—Doyenne d'Ete, Bartlett, Fondante d'Automne, White Doyenne, Louise Bonne de Jersey, Duchess d'Angouleme.

For Family—Doyenne d'Ete, Rostizer, Tyson, Bartlett, Fondante d'Automne, Howell, Seckel, Duchess d'Angouleme, Easter Beurre.

For Trial—Osband's Summer, Beurre d'Anjou, Glout Morceau, Bloodgood, Lawrence, Sheldon, Onondaga.

The following three committees on pruning were appointed for the three parts of the State, to report at the next meeting.

Northern—O. B. Galusha, A. R. Whitney, C. W. Murtfeldt.

Central—E. S. Hull, J. H. Stewart, M. L. Dunlap.

Southern—H. S. Finley, G. H. Baker, W. Hadley.

A delegation of ten was appointed to represent the Society at the Farmers' Convention, in Springfield, on the 5th of Jan.

G. W. Miner, C. N. Andrews, O. B. Galusha, C. W. Murtfeldt, J. P. Turner, M. L. Dunlap, E. S. Hull, Thos. Quick, W. C. Flagg, Wm. Hadley.

And the Society adjourned.

THURSDAY, Dec. 17, 1863. 9 P. M.

The morning session was opened with prayer by the Rev. Mr. Jameson.

The President named as the delegation to the next session of the Pomological Society, at Rochester, next autumn, Dr. John A. Warder, Dr. E. S. Hull, Dr. H. Schroeder and M. L. Dunlap.

An essay on the grape by Dr. John A. Warder, of Cincinnati, was listened to with great interest. Grapes in some variety or other, he said, can now be grown anywhere, and this delicious and healthful fruit is in reach of all. Yet there are some locations much more favorable than others for some variety. The slopes of the Alton bluffs he reckoned peculiarly good soil, and this with the atmospheric influence of the large body of water made by the confluence of the Mississippi and Missouri made Alton one of the most favored situations for the grape. Kelly's Island, in Lake Erie, far north of the latitude of best grapes, succeeded admirably, from the influence of the lake retarding its springs and prolonging its autumns.

The southern exposure though generally deemed the best for grapes, is not necessarily so. Had seen north hill sides ripen fruits before the southern slope of the same hill.

A north and south direction he considered best for trellis and grape rows, as it best admits the sun; but on steep declivities of southern exposure it would not answer so well on account of the tendency to wash—six to eight feet, best distances.

In pruning, the renewal system in some form is most approved.

The bow system under this head is approved by many. The plan of horizontal pruning is practiced by Mr. Mottier and others, but requires more stakes.

Trellis training is practiced by some. Mr. Knox,

of Pittsburgh, uses paling trellis eight feet high with strips nine inches apart.

Dr. Schroeder followed, speaking particularly on the subject of the over propagation of the Delaware as a cause of the inferior character of the plants therefrom.

Varieties were briefly discussed—the Delaware, Concord, Catawba and Diana.

THURSDAY, Dec. 17, 1863. 2 P.

Report of the committee on pears for Southern Illinois.

For Market—Bartlett standard, Flemish Beauty, Louise Bonne de Jersey.

For Family—Doyenne d'Ete, Osband's Summer, Bartlett standard, Flemish Beauty, White Doyenne standard, Belle Lucra ive, Louise Bonne de Jersey, Sheldon, Howell, Seckel, Beurre d'Anjou, Urbaniste, Lawrence.

For Trial—Beurre Giffard, Beurre Clairgeau, Tyson, Onondaga, Beurre Hardy, Duchess d'Angouleme, Beurre Diel, Wintor Nelis, Doyenne d'Alencon.

7 P. M.

The Wine committee reported a fine lot of wines on exhibition.

Of old Catawba, the best exhibited was by Valentine Hupp, of Belleville, St. Clair county, and the second by Dr. Feldner, of Hermann, Mo.

Of Catawba of 1863, the best was from Mr. Poeschel, of Hermann, and the second from Mr. Kuhn, of the same place.

Of New Concord wine (which they find to be a good light wine) the best was from Michael Poeschel, and the second best from William Poeschel, both of Hermann.

A sample of promising Delaware was presented by Wm. Poeschel.

A sample of Cassady, also promising, by Geo. Husmann.

Of three specimens of Norton's Virginia—all very superior wines—the best was presented by Geo. Husmann, and the second by Michael Poeschel.

Michael Poeschel presented a fine sample of mixed Norton's Virginia and Concord.

Fred. Humbert, of Upper Alton, presented some fine light wine of Catawba, too late to be examined with the other specimens.

Mr. Hoff, of Augusta, read an essay on Fruits and their Associations.

On motion of J. M. Hunter, of Ashley, the name of Ben Davis, was recognized as the true name of the apple called heretofore, New York Pippin, Baltimore Red, &c.

The subject of the next Annual Fair was left to the Executive Committee, with power to confer with the Missouri State Horticultural Society, and if deemed best, to hold a joint Fair in St. Louis, in 1864. The subject of the next winter meeting was also so referred.

PLUMS.

Dr. Hull described his curculio wheelbarrow, and the insects injurious to plum culture—the May bug, plum gonger, curculios of various kinds and sizes.

Of varieties for market the Doctor recommends Lawrence Favorite, Diamond (not good but sells well), Jefferson (good as Green Gage), slow grower at first, rapid grower afterwards. For market considerations color and size must be regarded. For general purposes the Doctor recommends Morocco (does not retain its leaves very well). Lawrence Favorite, Washington (not productive), Columbia, Imperial Gage grows in ropes on limbs (unpleasant skin), Blocker's Gage, Smith's Orleans (has had six bushels on trees six years old), Coe's Golden Drop has not done well, Pond's Seedling should be on market list. Is magnificent so far as tried. St. Catharine good. Blue Imperatrice, good late plum. Duane's Purple is not good enough. No experience with Blue Gland de Bevy (Dr. Warder says fine). Small yellow Gage, not desirable. Mirabelle, (small and very beautiful, as much as Pond's Seedling.)

Light colored fruit sells best. As we cannot grow peaches to a great extent in this State, he would recommend plums, which may be grown everywhere, from Cairo to Dunleith.

Dr. Warder says that Early Orleans is very early and profitable, though not very good.

Mr. Minier recommends Lloyd Shaw's Chickasaw for common cultivation.

Dr. Hull, on behalf of the committee on pears for Central Illinois, reported as follows:

For Market—Bloodgood, Bartlett, Doyenne Boussock, Easter Beurre.

For Family Use—Bloodgood, Doyenne Boussock, Bartlett, Howell, Louise Bonne de Jersey, White Doyenne, Belle Luerative, Sheldon, Seckel, Beurre Bosc, Gray Doyenne, Beurre Diel, Duchess d'Angouleme, Glout Morceau, Winter Nellis, Easter Beurre.

Adjourned.

FRIDAY, 2 P. M.

CHERRIES.

Dr. Hull gave his experience with varieties: Early Richmond or Early May is good. Gov. Wood is a nice cherry, well adapted to this locality, and a good bearer. Black Tartarian is the best cherry in this market. Bigarreau or Yellow Spanish is also good; Belle de Choisey always a shy bearer here. May Duke he likes; comparatively hardy. Gridley is a favorite market cherry with him, hangs on the tree a long time, keeps firm and comes late in market, hence its value; like the old Black Heart; does not think much of the Reine Hortense; Morellos are poor and unprofitable.

In this climate the foliage must be watched to keep it healthy. Trees must be kept growing until frost kills the leaves; has set the trees at 10 and 20 feet; the latter is the best distance. Tobacco water and soap suds are good to keep off bugs from trees. Curculio troubles cherries somewhat—uses curculio catcher early in the season—does not encourage low heads—has not found them a preventive against bark burrowing, and they prevent cultivation with the plow and due circulation of air beneath.

Dr. Warder thinks low heads best winter protection of trunks, but old trousers, &c., are good.

[Written for the Valley Farmer.]

Monthly Hints for Garden and Orchard.

BY CAREW SANDERS.

PLANS FOR THE NEW YEAR.

The winter months, and especially after the new year has set in, is a highly seasonable time to be laying out plans for the coming season. That much may be gained by having a well defined plan mapped out in one's head, if not on paper, even in the simple matter of providing a supply of vegetables and fruits for the table, is, I think, a question no one will deny.

The principal error farmers, and others unused to gardening, fall into, in attempting to supply their tables with an abundance and variety of vegetables during the season, is in regulating the different periods of seeding the different crops. He is very apt to sow too largely of one crop at one time, and neglect to sow at another, omitting some of the choicest things altogether, or sowing and planting too large a space, which often gets partially or wholly neglected, producing next to nothing, when a much smaller space of ground would be much more likely to receive proper culture, and with such would have produced an ample supply. Especially is this true of the root crops, which require a good deal of labor in hand-weeding and hoeing, which, if neglected, just amount to nothing at all; when, in reality, a very small amount of space—well manured and tilled—would produce an immense crop in bushels or bulk, as compared with the amount of land taken up. There are few, that are not professional gardeners, that are aware of the large amount of garden sauce than can

be grown on a given piece of ground. Deep cultivation, high manuring, and double cropping is what does it. It is not expected that farmers can adopt and carry out the practice of market or professional gardeners in this respect, but they can follow the same principle to some considerable extent, to decided advantage.

For instance, let a suitable piece of ground be selected and set apart for this purpose, of moderate size, corresponding to the size of the family to be provided for. Of course the best spot the place affords should be chosen as regards aspect, soil, situation, levelness, and so on. Let this receive an extra deep plowing, sub-soiling, harrowing and manuring, and if it is desired to cultivate with a horse as much as possible, let the crops be all planted in long parallel rows and strips, with a turn-row at each end, so that a one-horse plow or cultivator may run through a series of crops at the same time when they are ready for it, or each separate strip of ground may be plowed up, and cropped—an old crop plowed in—and so on, independent of its neighboring strips, and without interfering with other crops. Crops occupying very narrow strips indeed, may be plowed in, and others take their places by this plan. Of course these suggestions are intended to economize time, labor, &c., as much as possible, by substituting horse for hand labor wherever practicable; and which indeed is practicable to an almost unlimited extent.

The farmer with plenty of land can allow of sufficient distances between the rows of most crops to get a horse between them, and by having the crops well regulated as to extent, &c., can still have an ample supply off a comparatively small piece of ground, by frequent and thorough horse culture, aided a little by the hand and hoe.

The true economy of production is to produce the largest crops by the least amount of labor; and I am ready to contend and prove, that with garden crops at least, heavy crops taken off small pieces of ground, is the cheapest method of production.

In times like these, when labor of all kinds is scarce and high, and indeed when everything the farmer and householder has to buy is enormously high, and yet perhaps a large number of months have to be provided for, it behooves every one to look around and see where a little can be saved. The old adage says, "a penny saved is a penny earned," and with the farmer I think much may be saved not only in the methods of producing vegetables and fruits, but in having them abundantly and using them liberally at all seasons, in all the various shapes they are capable of being converted into, not only the green vegetables in summer and the roots in winter, but in the form of salads, sauces, extracts, pickles, preserves, jams, jellies and domestic beverages of all kinds made up from matured fruits and vegetables.

While on the score of health and longevity, individually and nationally, how infinitely and incomparably should we be the gainers, by a liberal, constant, and universal use of all the above in place of so much of the wretched corn juice, called whisky, and especially the lubricator used so commonly and so extensively to grease Young America's human machinery, viz.: fat pork, hog's lard, &c., the great breeder of biliousness, dyspepsia, ague, and many other ills which flesh is heir to.

If these crude and simple hints meet the approval of Mr. Editor, I may in some future articles try to particularize a little, how I would proceed to produce a constant, abundant, and not very much over supply of fresh, wholesome vegetables all through the year.

A. M. Burns, Esq., of Manhattan, Riley county, Kansas, forwards leaves of a grape he has in cultivation. They were much dried, but we think they are the Clinton.

[Reported for the Valley Farmer.]
Meramec Horticultural Society.

EUREKA, Nov. 5, 1863.

The sixtieth monthly meeting was held in the school house. President Beale in the chair.

The Fruit Committee reports: We find upon the table, Rhode Island Greening, Ortley and McKinlay, by P. M. Brown. The Rhode Island Greening the finest ever exhibited on our tables. Also the Canada Reinette. Jas. Shields has Beurre Langallier pear. Judge Tipsett has Winter Calville, Canada Reinette, Pryor's Red, Wine Sap and Esopus Spitzenberg. Wm. Muir has Baldwin, Janet, and a fine late winter variety, name unknown. L. D. Votaw has Reinette of Berlin and McKinlay. J. S. Seymour has Wilson's Albany strawberry, about half grown.

J. S. SEYMOUR, Ch.

The Vegetable Committee reports: A very large specimen of an unknown variety of potato weighing 26 ozs., and represented to be of good quality, by Jas. Shields. A singular specimen of the Cherry Blow—three tubers connected together, one of the three being quite white—by Dr. Beale. Specimens of white Neshannock Pinkeye and Blue Kidney, by L. D. Votaw.

T. R. ALLEN, Ch.

The Executive Committee reported "Winter Plowing" as the subject of discussion at the next meeting. Adopted.

The subject of "Grape Pruning" being in order, was discussed by Messrs. Arnoldt, Seymour, Allen, Votaw, and the Secretary, all agreeing as to the superiority of the Horizontal Cordon trellis system over all other systems, in its simplicity, uniformity of shade, ventilation and the distribution of sap, and thought its general adoption in our climate would be of great advantage to the grape grower.

The President announced that the next meeting be held in the Allenton School House, at 10 A. M., on the first Thursday of December, and being the Annual Meeting, the election of officers will take place.

ALLENTON, Dec. 3, 1863.

The sixty-first monthly meeting was held as above. President Beale in the chair.

The Secretary reported a communication from the Smithsonian Institution.

The President reported a communication from the Illinois State Horticultural Society, in regard to their Annual Meeting at Alton, whereupon it was, on motion, **RESOLVED**, That the President, Secretary, with Messrs. L. D. Votaw, Wm. Harris, T. R. Allen and G. W. Davis, be appointed Delegates to represent this Society at the Annual Meeting of said Society. Adopted.

It was, on motion, **RESOLVED**, That small blank circulars shall be procured by the Secretary, to be filled up monthly, giving notice of the place of meeting, and sent to be put up at the several post offices in the Township, or such places as may be deemed desirable. Adopted. And a sum of money collected to defray expense.

The Fruit Committee find on the table, presented by Mr. Wm. Harris, specimens of Esopus Spitzenberg, Black Gilliflower, Wine Sap, Pryor's Red, Rawles' Janet, Ortley, Newtown Pippin, and one very large apple supposed to be Baldwin. By Geo. W. Davis, an unknown variety, supposed to be a seedling. White Spanish Reinette, Pryor's Red and Lansingburg.—By T. R. Allen, Limber Twig, Rawles' Janet, Newtown Pippin, Rambo, Pennsylvania Red Streak, Pryor's Red, and Ortley. T. R. ALLEN, Ch. pro tem.

The Annual Report of the Fruit Committee not having been presented, was, on motion, postponed till next meeting.

It was, on motion, **RESOLVED**, That the Annual Election of office bearers be postponed till next meeting. Adopted.

The President announced that the next meeting be held in the school house at Eureka, on the first Thursday of January, 1864, at 10 A. M. Wm. Muir, Sec.

Domestic Department.

ORIGINAL RECIPES.

IMPROVED PAN CAKE.—Mix your flour with cold sour milk, buttermilk best. Add a little soda; stir and bake at once. The point in this is, that your milk be cold, otherwise you will have but the ordinary success. If the batter is raised when you mix it with the soda, it will fall before you get it baked. But if your milk or batter is cold (as cold as ice, all the better,) it will not rise till it gets on the griddle; and then it will bake as it rises, the heat driving it up, and that higher than in the jar, as it is heat that causes the fermentation. Thus you bake it, not only when risen to the highest point the batter in the jar (under ordinary circumstances) would admit, but the excess of heat on the griddle raises it higher than can possibly be done in the jar. Mix then your batter, very cold with flour, sour milk, a little salt and soda, bake at once, on a griddle somewhat hotter than ordinarily, so as to give a rich brown surface to the cake. It will be seen thus that emptyings (yeast) are dispensed with. But salt must be used so as to get rid of the raw taste. A little more salt is thus required than when emptyings are used, bake and turn quicker than usual. The discovery is our own.

TO PRESERVE BUTTER DURING THE WINTER.—Make in convenient rolls for table use, and put in strong brine. A small weight on top will keep the rolls down. By this way, winter butter may be made any time during the fall, as it will "keep a year, sweet and fresh," says our informant, who practices it successfully. The rolls will always be ready for the table with the heads on them.

HOW TO TEST A DISH.—Our taste is not always the same, but varies in the different meals. Hence, there should be more than one test before a thing is condemned.

COFFEE.—Coffee should be ground as fine as possible, and then boiled but a few minutes. An old mill will grind it finer than a new. The finer it is ground the stronger it will be.

SHORT CAKE TOAST.—The nicest toast we can eat is biscuit or short cake toast. It is an experiment of our own, that we accidentally got into, and that we can't get out of. Try the short cake. You will find it more crumbly and less hard. Hence, just the thing for dry toast, the way we use it.

TO CURE A FEVER.—Let it alone.

TO CURE A COLD.—Prevent taking more.

SAVE YOUR COB-WEBB.—We just called at a neighbor's, where a lad cut his thumb. The wound bled profusely. While we were in the act of tying it up a bit of cob-web was brought, with the request that it be tied on. The application was no more than effected before the blood stopped. We never saw a prompter action. We then learned that the application was in common use, and always efficacious. Save the webs.

HOW TO SOFTEN THE SKIN, &c.—Take a small lump of gum tolu (a fragrant balsam), about the size of a walnut, and put in your wash dish half an hour before washing. It will have a softening, pleasant effect on the skin; and also lessen freckles, and other disagreeable marks.

HOW TO HAVE A SHARP RAZOR.—Take a strap of thick leather, such as is used for harness, and fasten at each end upon a piece of wood. Then rub upon its surface a piece of tin until it is smooth. It is said to be worth all the patent straps that have ever been invented.



A SKETCH BY LOWELL.

A youth named Rhoeus, wandering in the wood,
Saw an old oak just trembling to its fall;
And feeling pity for so fair a tree,
He propped its gray trunk with admiring ears,
And with a thoughtless footstep loitered on.
But, as he turned, he heard a voice behind
That murmured "Rhoeus!" 'Twas as if the leaves,
Stirred by a passing breath, had murmured it;
And while he paused bewildered, yet again
It murmured "Rhoeus!" softer than the breeze.
He started, and beheld with dizzy eyes
What seemed the substance of a happy dream
Stand there before him, spreading a warm glow
Within the green glooms of the shadowy oak.
It seemed a woman's shape, yet all too fair
To be a woman, and with eyes too meek
For any that were wont to mate with gods.
All naked like a goddess stood she there,
And like a goddess all too beautiful
To feel the guilt-born earthliness of shame.
"Rhoeus, I am the Dryad of this tree!"
Thus she began dropping her low-toned words,
Serene and full, and clear, as drops of dew—
"And with it I am doomed to live and die;
The rain and sunshine are my caterers,
Nor have I other bliss than simple life;
Now ask me what thou wilt that I can give,
And with a thankful joy it shall be thine."

Then Rhoeus, with a flutter at the heart,
Yet, by the promptings of such beauty, bold,
Answered: "What is there that can satisfy
The endless craving of the soul but love?
Give me thy love, or but the hope of that
Which must be evermore my spirit's goal."
After a little pause she said again,
But with a glimpse of sadness in her tone,
"I give it, Rhoeus, though a perilous gift;
An hour before the sunset meet me here."
And straightway there was nothing he could see
But the green glooms beneath the shadowy oak;
And not a sound came to his straining ears
But the low trickling rustle of the leaves,
And, far away upon an emerald slope,
The falter of an idle shepherd's pipe.

Now, in those days of simpleness and faith,
Men did not think that happy things were dreams
Because they over-stepped the narrow bourne
Of likelihood, but reverently deemed
Nothing too wondrous or too beautiful
To be the guerdon of a daring heart.
So Rhoeus made no doubt that he was blest;
And all along unto the city's gate
Earth seemed to spring beneath him as he walked;
The clear, broad sky looked bluer than its wont,
And he could scarce believe he had not wings—
Such sunshine seemed to glitter through his veins
Instead of blood, so light he felt and strange.

Young Rhoeus had a faithful heart enough,
But one that in the present dwelt too much,
And, taking with blithe welcome whatsoever

Chance gave of joy, was wholly bound in that,
Like the contented peasant of a vale,
Deemed it the world, and never looked beyond.
So, haply meeting in the afternoon
Some comrades who were playing at the dice,
He joined them and forgot all else besides.

The dice were rattling at the merriest,
And Rhoeus, who had met but sorry luck,
Just laughed in triumph at a happy throw,
When through the room there hummed a yellow bee
That buzzed about his ear with down-dropped legs,
As if to light. And Rhoeus laughed and said,
Feeling how red and flushed he was with loss,
"By Venus! does he take me for a rose?"
And brushed him off with rough, impatient hand.
But still the bee came back, and thrice again
Rhoeus did beat him off with growing wrath.
Then through the window flew the wounded bee;
And Rhoeus, tracking him with angry eyes,
Saw a sharp mountain peak of Thessaly
Against the red disk of the setting sun,
And instantly the blood sunk from his heart,
As if its very walls had caved away.
Without a word he turned, and rushing forth,
Ran madly through the city and the gate,
And o'er the plain, which now the wood's long shade,
By the low sun thrown forward broad and dim,
Darkened well nigh unto the city's wall.

Quite spent and out of breath, he reached the tree;
And listening, fearfully, he heard once more
The low voice murmur "Rhoeus!" close at hand,
Whereat he looked around him, but could see
Naught but the deepening glooms beneath the oak.
Then sighed the voice, "Oh, Rhoeus, never more
Shalt thou behold me, or by day or night—
Me, who fain would have blest thee with a love
More ripe and bounteous than ever yet
Filled up with nectar any mortal heart;
But thou didst scorn my humble messenger,
And sent'st him back with bruised wings.
We spirits show only to gentle eyes—
We ever ask an undivided love;
And he who scorns the least of nature's works
Is thenceforth exiled and shut out from all.
Farewell! for thou canst never see me more."

Then Rhoeus beat his breast, and groaned aloud,
And cried, "Be pitiful! forgive me yet
This once, and I shall never need it more."
"Alas!" the voice returned, "Tis thou art blind,
Not I unmerciful; I can forgive:
But have no skill to heal thy spirit's eyes;
Only the soul hath power o'er itself."
With that again there murmured "Never more!"
And Rhoeus after heard no other sound
Except the rattling of the oak's crisp leaves.

Smith has made an assertion to Jones, Jones
replied that it was a confounded lie—kely sto-
ry." Smith first started, and then blandly re-
quested Jones to be kind enough to place his
syllables closer together upon the next occasion.

Jones and Brown were talking lately of a
young clergyman whose preaching they had
heard that day.

"What do you think of him?" asked Brown.
"I think," said Jones, "he did much better
two years ago."

"Why, he didn't preach then," said Brown.

"True," replied Jones, "that is what I mean."

As love without esteem is volatile and capri-
cious, esteem without love is languid and cold.
—[Johnson.

When love's well-timed, 'tis not a fault to love;
The strong, the brave, the virtuous and the wise
Sink in the soft captivity together. [Addison.

THE WILD TURKEY.

Genus MELEAGRIS: Meleagris.—To this belongs our common wild turkey, *M. gallopavo*—Dindon of the French—now known as a domestic fowl in most civilized countries, but which was confined to America until after its discovery by Columbus; it was probably introduced into Europe by the Spaniards about the year 1530. It was found in the forests of North America, from the Isthmus of Darien to Canada, when the country was first settled, being then abundant, even in New England; at present a few are found in the mountains of Massachusetts, New York and New Jersey; and in the Western and South-western States they are still numerous, though constantly diminishing before the extending and increasing settlements. The wild male bird is 3 to 4 feet long, and weighs from 15 to 40 pounds; its color is black, glossed with purple and bronzed green; the head and neck are covered with a bare carunculated skin, and at the base of the bill there is a singular fleshy appendage, which is usually of considerable length.

The breast is ornamented with a tuft of long black hair. The habits of these birds in their native wilds are exceedingly curious. The males, called gobblers, associate in parties of from ten to a hundred, and seek their food apart from the females, which either go about singly with their young, at that time about two-thirds grown, or form troops with other females and their families, sometimes to the amount of seventy or eighty. These all avoid the old males, who attack and destroy the young, whenever they can, by reiterated blows on the skull. But all parties travel in the same direction, and on foot, unless the dog of the hunter, or a river in their line of march, compel them to take wing.—When about to cross a river they select the highest eminences, that their flight may be more sure, and in such positions they sometimes stay for a day or more, as if in consultation. The males upon such occasions gobble obstreperously, strutting with extraordinary importance, as if to animate their companions; and the females and young assume much of the pompous air of the males, and spread their tails as they move silently around. Having mounted, at length, to the tops of the highest trees, the assembled multitude, at a signal from their leader, wing their way to the opposite shore. The old and fat birds, contrary to what might be expected, cross without difficulty, even when the river is a mile in width; but the wings of the young and meagre, and of course those of the weak, frequently fail them before they have completed their passage, when they drop, and are forced to swim for their lives, which they do cleverly enough, spreading their tails for a support, closing their wings, stretching out their necks, and striking out quickly and strongly with their feet. All do not succeed in such attempts, and the weaker often perish.

The wild turkey feeds on maize, all sorts of



berries, fruits, grasses, and beetles; tadpoles, young frogs, and lizards are also occasionally found in their crops. The pecan nut is a favorite food, and so is the acorn, on which last they fatten rapidly. About the beginning of October, while the mast still hangs on the trees, they gather together in flocks, directing their course to the rich bottom lands, and are then seen in great numbers on the Ohio and Mississippi. This is the Turkey month of the Indians.—When the turkeys have arrived at the land of abundance, they disperse in small promiscuous flocks of every sex and age, devouring all the mast as they advance. Thus they pass the autumn and winter, becoming comparatively familiar after their journeys, and then venturing near plantations and farm houses. They have been known on these occasions to enter stables and corn cribs in search of food. Numbers are killed in the winter, and are preserved in a frozen state for distant markets. The beginning of March is the pairing period, for a short time previous to which the females separate from their mates, and shun them, though the latter pertinaciously follow them, gobbling loudly. The sexes roost apart, but at no great distance, so that when the female utters a call, every male within hearing responds, rolling note after note in rapid succession; not as when spreading the tail and strutting near the hen, but in a voice resembling that of the tame turkey when he hears any unusual or frequently repeated noise. Where the turkeys are numerous, the woods, from one end to the other, sometimes for hundreds of miles, resound with this remarkable voice of their wooing, uttered responsively from their roosting places. This is continued for

about an hour; and, on the rising of the sun, they silently descend from their perches, and the males begin to strut for the purpose of winning the admiration of their mates. If the call of a female be given from the ground, the males in the vicinity fly toward the individual, and, whether they perceive her or not, erect and spread their tails, throw the head backward, distend the comb and wattles, strut pompously, and rustle their wings and body feathers, at the same moment ejecting a puff of air from the lungs. While thus occupied they occasionally halt to look out for the female, and then resume their strutting and puffing, moving with as much rapidity as the nature of their gait will admit. During this ceremonious approach the males often encounter each other, and desperate battles ensue, when the conflict is only terminated by the flight or death of the vanquished. The usual fruits of such victories are reaped by the conqueror, who is followed by one or more females, which roost near him, if not upon the same tree, until they begin to lay, when their habits are altered, with the view of saving their eggs, which the male breaks if he can get at them. These are usually from nine to fifteen in number, sometimes twenty, whitish, and spotted with brown, like those of the domestic bird. The nest consists of a few dried leaves placed on the ground, sometimes a dry ridge, sometimes in the fallen top of a dead leafy tree, under a thicket of sumach or briars, or by the side of a log. The females are particularly attentive to their young.

LEAKY ROOFS.—I have great pity for the people, and especially for the ladies, who live beneath a leaky roof—and a magnanimous desire to preserve the patience and confer a favor on the dear creatures, and the rest of mankind, induces me to send you the following recipe, instead of making it, as a grasping fellow might, "a close monopoly by patent right." Take pure white lead, and mix with boiled oil, until it is about the thickness of thin paint. Add to this common sand, such as is used in plastering, until the paint is about the consistency of mortar. The cement is now ready for use, and may be applied to leaks in roofs or around chimneys, with a trowel or case-knife. When dry, it will be as hard as stone, and will do excellent "picket duty," in preventing demoralized rain-drops from straggling down through shaky places in the shingles. In reference to this recipe, I can say, in the language of a certain rural editor who advised his readers to purchase a certain kind of soap, because it was "sure to clean dirty men's faces," I have tried it and know it to be good.—[*Cor. Dollar Newspaper.*]

KEEPING EGGS.—Eggs should never be kept in a warm room in winter, as the heat will spoil them.—Keep as cold as possible without freezing.

TO COLOE PICKLED CUCUMBERS.—We came across a tough case of pickles the other day.—They were pale, and in no way could the matron secure the wanted green. The brass kettle was used; but the brass kettle had no effect. We find too many such cases of pale, flabby cucumbers, which can be, as well as not, restored to their original green, solid state. Simply apply alum. A small lump is sufficient. Put in the brine, or when the vinegar is thrown over them. Avoid the poisonous brass.

COOKED MEAT.—The best meat is that cooked while the air is excluded. Put in a tin vessel; fill up snug; seal up tight; and boil six hours. Then open and eat. The juices will all be there, reduced just to the nice point. It should be seasoned (with salt and pepper) before put in the can.

We should be our own doctors. We get sick by our own fault (generally); and we get well (generally) in spite of the doctors. Doctor yourself. "Oh, but! I'd die." So most people do—in the doctor's hands. Hence all doctors are popular, i.e., all kinds, quacks of all denominations. The age is against medicine; yet everybody is taking it. The truth is medicine prolongs sickness, in the majority of cases. It is so natural to call on the doctor. Yes, it is a habit; and we should break through it. "What! not get a doctor when a raging fever sets in?" No, sir! Remember, *Doctors seldom take their own medicines.* Medicines nauseate, sicken, aggravate. Doctors are shrewd, and know, like politicians, how to get your money out of your pocket. Doctors' bills are among the great curses. Try a little less doctoring; run the risk. The most is to make a start. Do not heed the doctor when he says: "You should have called me earlier; the case is"—shaking his head. Depend upon it, it is all make-believe on his part. Now and then a doctor will aid; but these cases are known. F.G.

Candy rots children's teeth. The more sweetmeats they eat, the more their teeth will rot.—The sweet turns into sour, and the sour eats the teeth. Hence so many rotten teeth, among even young children.

HUSMANN'S ESSAY ON THE GRAPE.—Geo. Husmann, of Hermann, Mo., has favored the public with an essay or treatise on grape culture. To those cultivating grapes in the West, it is worth half a dozen of the Eastern treatises on this subject. It is written in a clear, methodical style, each necessary branch of the subject is treated concisely, and one cannot fail to understand the modus operandi of grape culture by carefully perusing this essay. We hope at some future day Mr. Husmann will furnish the public with a more elaborate treatise.

DIED

OF CONSUMPTION, ON FRIDAY, DEC. 18TH, 1863,

Clara H.,*Wife of Norman J. Colman,*

Aged 31 years 2 months 15 days.

A pure and affectionate wife, a kind and devoted mother—her loss to us is severe. Without a blemish on earth, her home is now with angels and archangels.

**Editor's Table.****THE NEW YEAR.**

A happy new year to all our readers! This is our greeting. And we mean all that the language conveys. We do sincerely and profoundly wish that the new year may be to each and every one of our patrons a happy one! We hope that the farmer, stock breeder, fruit grower and florist may the present year be abundantly rewarded for their labors. And, so far as we can, we shall strive to furnish such advice and instruction as will guide them to success in their various departments of rural life. We hope and devoutly pray that the unhappy civil strife that is now raging may soon subside, and that both sections may again be brought to act in harmony, and that they may know war no more. We do hope that our brethren now in the tented field, of both sections of our beloved country, before our next New Year's greeting will be engaged in the peaceful and productive pursuits of Agriculture, Manufactures and the Mechanic Arts.

The great study of the farmer this year will be to economize labor, how to raise the largest crops with the least number of hands. We have all been cultivating too much land—and putting in our crops too slovenly. The first motto the farmer should adopt the present year, is to put no more land in crops than can be put in thoroughly. Fifty acres of corn, wheat, or any other crop put in at the right time, and in the right manner, in soil well plowed and prepared for the seed, and the seed well selected and of the best variety, will produce a greater number of bushels of marketable grain than one hundred planted or sown as is commonly done. Careful experiments have demonstrated this over and over again. And then how much more profitable to cultivate the fifty acres well, than the one hundred poorly. Those of our readers who have more land under the plow than they can cultivate properly, will find it greatly to their interest to put a part of it in grass or clover. If the soil needs fertilizing, put it in clover, and if you have not

stock to feed on the clover, or time to cut it for hay, let it remain on the ground and decay. It is astonishing how soon barren fields will be made productive by so doing. We have seen the system practiced, and it seemed as if the hand of magic had been employed, so great was the change effected in two or three years without any labor. The clover itself acts as a mulching when used for meadow or pasturage, but when allowed to remain on the ground of course the mulching material is far greater, it falls upon the ground and keeps it warm as a covering of snow. At the North snow is called "the poor man's manure," and if it lies upon the ground deeply all winter the soil is considered greatly benefitted. In this climate we have snow upon the ground but a few days during the winter, and receive but little benefit from it. Here we should say "clover is the poor man's manure," and the rich man's too. Let your clover grow on your poor fields and neither pasture it nor mow it, and you will soon see fields made fertile again.

One of the leading errors of the American people is that we try to do too much. We want too large farms, too many acres under cultivation for the number of our hands, too much stock for the size of our pastures and meadows. We look more to extent, quantity, than we do to quality. In raising horses, mules, cattle, we look more to the number than to the quality of those we raise, forgetting one good animal will sell for more money than three or four poor ones, and cost no more to raise, while the dams of the three or four are eating away all the profits.

In fruit matters, the same error exists. If we would plant one-half or one-fourth of what we do, and would bestow the same amount of labor in planting those few properly, and giving the requisite attention afterwards, it would be far better for all concerned. But so little fruit is planted, we don't want to advise people to plant less; but we do wish to urge them to bestow more labor on what they do plant. They should prepare their ground better, plant their trees more carefully, watch the insects more closely, apply more alkalies to the bodies of their trees, and cut out with more care, at the proper time, all straggling, interfering, unnecessary shoots.

Let us, one and all, turn over a new leaf, begin anew with the year, give our noble profession our whole heart, study it, and strive to elevate it and excel in it. That one and all of our readers will do this, is our sincere wish.

SUGAR FROM SORGHUM.—We have received a sample of very fine sorghum sugar from E. A. Collins, Esq., of Lanesfield, Johnson county, Kansas. The sugar is of a light straw color, nicely grained, and looks as if it would answer for any purpose that cane sugar could be used for. The taste is pleasant and seems to be free from that acidity which is peculiar to the sorghum.

The "Musical Miscellany" is the title of a new monthly devoted to the cause of Music in the great West, and published at Chicago, Ill., by J. M. Griffin. Price, 50 cents per annum. We commend it to the lovers of music.

Devon Cattle.

The demand for this breed of cattle is considerably on the increase. We have frequent inquiries from our subscribers, where pure bred Devons can be obtained, and whether we can recommend the breed. Some of the best cows for milk that we are acquainted with, are of this breed. This breed can be recommended for their milking qualities. It is a breed that is easily kept. The Devons will thrive well where some of our breeds will grow poor. It is an exceedingly hardy breed—the hardest that is known. Attended to as many of our Western farmers attend to their stock, they surpass any other breed—we mean, by giving them no shelter during winter but the lee side of the fence, and expose them to storms of rain and snow, with little or no food except such as they gather by browsing in the forest. But we don't wish to be understood as recommending such treatment, even for the hardy Devon. They make remarkably excellent working cattle, on account of their active gait and excellent bottom, enduring more work and greater heat, without fatigue, than any other breed with which we are acquainted.

To those who wish to know where this fine breed can be obtained at reasonable prices, we will say that W. C. Flagg, Esq., of Mero, Madison Co., Ills., and Dr. W. W. Henderson, of Bridgeton, St. Louis Co., Mo., have them. Both are reliable breeders.

AN AGRICULTURAL COLLEGE IN MISSOURI.—We have now the pleasing prospect of the establishment of an Agricultural College in Missouri. The State Legislature has accepted the liberal donation of lands from the general government for that purpose, and steps will be immediately taken to carry out the purposes of Congress in making the bounty. The day is not distant when the farmers of Missouri will have the opportunity of not only giving a liberal education to their sons, but of training them to the profession to which their lives will be devoted, thereby making agriculture as much one of the learned professions as Law, Medicine or Theology, and as highly respected.

THE MISSOURI STATE HORTICULTURAL SOCIETY.—Holds its Annual Meeting in the city of St. Louis, commencing Tuesday, Jan. 12th, and continuing in session four days. Need we urge upon our horticultural friends the importance of attending this meeting. Those who can come, and do not, know not how much they will lose. A real horticultural feast is in store for all, and all are earnestly invited to partake of it. All the railroads in Missouri will return members to their homes free of charge, and probably most of the railroads in Illinois will do the same. Our Southern Illinois friends are urgently solicited to attend. Southern Illinois and Missouri are so similar in climate and soil, that the experiences of fruit growers in one State are a good guide to those of the other State. We hope to see a large gathering.

THE PRACTICAL SHEPHERD.—We are in receipt of this new work, written by Hon. H. S. Randall, of New York. Mr. Randall has written much and well upon sheep husbandry, and we consider him the best authority on that subject in the United States. The present volume is neatly illustrated and contains 454 pages. The merits of the different breeds of sheep are discussed, and their adaptation to different localities is pointed out, with the best modes of management. Of course we recommend every one owning a flock of sheep to purchase the book. Address, D. D. T. Moore, Publisher, Rochester, N. Y. Price, \$1.50

FRUIT TREES VS. RABBITS.—In winter rabbits are very destructive to fruit trees by gnawing off the bark of young fruit trees. In orchards it is necessary to protect the bark of trees by tying straw, paper, or some thing of the kind around the body of the young tree as high as the rabbits can reach.

Another method we have tried successfully is to smear the young trees with blood, or rub them with liver or old refuse meat, carion, &c. The olfactorys of the rabbit are very sensitive, and he would starve before putting a tooth to a tree where the bark was smeared with such matter. But keep grease off the bark of young trees. It fills up the pores and injures the trees.—Perhaps two or three applications of blood may be necessary during the winter.

RHUBARB, OR PIE PLANT.—We see in nearly every garden a few plants of Rhubarb—but they are of that small, stringy, acid kind, unworthy of cultivation. These plants have been mostly raised from seed. But there is nothing on which less reliance can be placed than the seed. There is not one chance in a thousand that you will get a single plant as good as the parent, and the most of the seeds will produce inferior varieties, with small, tough footstalks unfit for cooking. Persons who have been used to such pie plant know nothing of the merits of the improved kinds. From the fact that pie plant can be used for cooking long before the green fruits are in readiness, it should form one of the cultivated esculents by every family. When properly prepared and made into pies and tarts, it very much resembles the gooseberry cooked in the same manner.

It will grow in any good garden soil. Out of more than a dozen varieties we have in cultivation, we find nothing to equal the Linnous in earliness, productiveness, agreeableness of acidity, and in the tenderness of the pulp. Pies made from it can hardly be detected from the best green apple pies. Plant in spring. Set the plants three feet apart each way. The roots will produce large stalks for a number of years, but should be divided and re-set every third or fourth year.

AGRICULTURAL MEETING.—The annual meeting of the Macoupin County Agricultural and Mechanical Society was held at Carlinville, Nov. 5th, 1863.

Minutes of the last meeting read and approved.

On motion, the annual report of the Executive Board was read and adopted.

On motion, ordered that the report be published in the "Free Democrat" and "Spectator," and also in the "Valley Farmer" and "Illinois Farmer."

On motion, the following officers were elected for the ensuing year:

President, W. C. Waters, Carlinville.

Vice-President, J. C. Dugger, "

Secretary, John Tunnell, Plainview.

Treasurer, T. L. Loomis, Carlinville.

Directors—D. McDaniel, D. Gore, Carlinville; M. Olmsted, Shipman; L. Johnson, Buford; H. J. Loomis, Chesterfield.

On motion, adjourned. JOHN TUNNELL, Sec.

QUERIES AND ANSWERS.

N. J. COLMAN: Dear Sir—Can you inform me who has the breed of Spanish Merino sheep for sale. I allude to the sheep now almost entirely raised in Vermont; I am informed also in Ohio. Both places are most too far to get them now, probably some one has brought on some to this State, I wish to procure two ewe lambs of last spring's growth, lambs that will have young the coming season. If you can inform me I shall be very much obliged. **G. B. JOHNSTON.**
St. Charles, Dec. 12, 1863.

[ANSWER.—The Spanish Merino are extensively raised in Illinois. Will some of our Illinois readers inform Mr. Johnston where he can procure the pure breed.]

ED. VALLEY FARMER: Having endeavored to get Browne's or Richardson's Book on Poultry and failed, you would oblige by informing me where I can procure some Black Spanish fowls of the right breed.
Cuba, Mo. **WM. JESTINE.**

[ANSWER.—By remitting \$1.25 to the Publisher of the "Valley Farmer," he will procure Browne's Am. Poultry Yard and send it free of postage. **S. B. SILVER,** of Salem, Ohio, has black Spanish fowls for sale; any letter addressed to him will be promptly answered.]

HOGS IN ORCHARDS.—**N. J. COLMAN**—Dear Sir: I have a young, thrifty orchard that has been planted seven years. Last spring I seeded it to clover. It is very convenient for a pasture for my hogs. I wish to know if it will answer to pasture my hogs in this orchard the coming summer. By answering through the columns of your valuable journal you will oblige
A CONSTANT READER.

[ANSWER.—Our correspondent need have no fears of turning his hogs in his orchard. They will not injure it; on the contrary, it is the best thing he can do for his orchard. They will consume all the fallen, diseased fruit. This is a matter of very great importance. Those having orchards should see to it that this diseased fruit is not suffered to lie upon the ground and decay, thereby permitting the insects contained in it to take refuge in the ground and their progeny to again appear and destroy a greater quantity of fruit the ensuing season. It must be picked up, or the hogs turned in to devour it as it falls. Insect depredators can thus be kept in check. Every year we see the necessity of paying more attention to the destruction of insects. Nearly all our fruit is greatly injured or destroyed by them. The hogs can feed upon the clover, and their excrements will aid in fertilizing the soil. When the orchard is well grown, sheep may be turned in it during the summer, but cattle and horses should be kept out. If the hogs root a little around under the trees it will not do much harm. All having orchards can turn their swine in them with the greatest advantage.]

What a subscriber says of our Journal:

EDITOR VALLEY FARMER: I enclose herewith one dollar Treasury note to renew my subscription to the "Valley Farmer." I have been a constant reader of your valuable journal for fifteen years, and would not do without it for five times the price of it. With my best wishes for the success of the "Valley Farmer,"
I remain yours, &c., **DAVID A. ELY.**
Kirksville, Mo., Dec. 22, 1863.

GANG PLOWS.—I wish to buy a gang plow, but do not know which patent is the best. I request you to give, if possible, some information on the subject.—
Yours most respectfully, **CHAS. W. VINCENT.**

[ANSWER.—We have not sufficient experience with them to advise. If any of our readers can speak from experience they will oblige by giving their views. We want facts, not theories.]

FRIEND COLMAN: Can thee tell me where I can obtain a full blooded greyhound pup? And can the same be sent, think thee, without damage the coming spring. If so, how? I am annoyed extremely by rabbits, and think dogs are the best preventive. I have twenty acres all planted to standard fruit, and it is some trouble, I can assure thee, to keep them safe from their depredations.
Lawrence, Kan. **G. C. BRACKETT.**

[ANSWER.—If any of our subscribers have greyhound pups, and will notify our correspondent, they will confer a favor. Our friend, Dr. Benj. O'F. Farrar, of St. Louis county (St. Louis P. O.), offered to give us one last summer, but we did not accept the offer. Perhaps our friend can obtain one of the Doctor. A pup can be easily and safely sent by express.]

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